

1044b UIC - EAST POPLAR OIL FIELD  
ENFORCEMENT CASE SDWA 1431  
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Region 8  
  
13666

32P

EAST POPLAR UNIT WELL NO. 32

ROOSEVELT COUNTY, MONTANA

MURPHY CORPORATION--OPERATOR

*Bee Helton*

EAST POPLAR UNIT WELL NO. 32

ROOSEVELT COUNTY, MONTANA

HURFMY CORPORATION--OPERATOR

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## W E L L   H I S T O R Y

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WELL NO.: East Poplar Unit No. 32

LOCATION: SW NW Section 15, Township 28 North, Range 51 East

ELEVATION: 2079' Gr. - 2088' K.E.

DRIG. CONTRACTOR: Peared Drilling Company

SPOUDED: 11:00 A.M., March 22, 1954  
Rig released 2:00 P.M., April 21, 1954

COMP. CONTRACTOR: Western Oil Well Service Co.

COMPLETED: May 8, 1954

TOTAL DEPTH: 5821' Schlumberger equals 5816' Driller

CASING: 9 5/8" @ 992.55' w/390 sx cement  
5 1/2" @ 5819.00' w/300 sx cement

TUBING: 2 3/8" @ 5768.13'

PERFORATIONS: "C" Zone 5790'-5800'

PACKER: None

ACID TREATMENT: "C" Zone - 3000 gallons etching acid

INITIAL POTENTIAL: 4.75 BFPH, 88% water

TYPE COMPLETION: Single Producer in the "C" Zone

EAST POPLAR UNIT NO. 32

- 10-05-94 Move in rig up pulling unit. Pump 100 barrels corrosion inhibited 10.2# water down casing, 20 barrels down the tubing. Pull tubing and lay down. Shut down.
- 10-06-94 Rig up Penkota Wireline run in to 5400' and set 5½" B.P. rig down.
- 10-23-94 Pressure casing to 500#'s held for 30 minutes.

206 60807

ASSIGNED EFFECTIVE 12/31/52 FROM C.H. MURPHY, Jr. ALL TO: MURPHY CORPORATION 15/32  
PLACID OIL CO. 16/32  
Wm. & THEODOSA NOLAN 1/32

ASSIGNED EFFECTIVE 9/29/54 FROM MURPHY TO: MARINE OIL 1/4 OF 15/32 OR 15/128  
OWNERS: MURPHY 45/128, PLACID OIL CO. 64/128, NOLANS 4/128, & MARINE OIL 15/128

ASSIGNED EFFECTIVE 4/1/55 FROM MARINE OIL TO Wm. J. SHERRY 1/4 OF 15/128 OR 15/512  
OWNERS: MURPHY 180/512, PLACID OIL CO. 256/512, NOLANS 16/512, MARINE OIL 45/512,  
& Wm. J. SHERRY 15/512

ASSIGNED EFFECTIVE 4/4/55 FROM Wm. J. SHERRY TO: MURPHY 1/4 OF 15/512 OR 15/2048  
OWNERS: MURPHY 735/2048, PLACID OIL CO. 1024/2048, NOLANS 64/2048, MARINE OIL 180/2048,  
& Wm. J. SHERRY 45/2048

ASSIGNED EFFECTIVE 4/2/82 FROM PLACID OIL CO. TO: PARTNERSHIP PROPERTIES COMPANY- ALL  
OWNERS: MURPHY 735/2048, NOLANS 64/2048, MARINE OIL 180/2048, Wm. J. SHERRY 45/2048,  
& PARTNERSHIP PROPERTIES COMPANY 1024/2048

ASSIGNED EFFECTIVE 12/16/86 FROM PARTNERSHIP PROPERTIES COMPANY TO: FAIRWAY RESOURCES, INC.  
(896/2048), & TPEX EXPLORATION, INC. (128/2048)  
OWNERS: MURPHY 735/2048, NOLANS 64/2048, MARINE OIL 180/2048, Wm. J. SHERRY 45/2048,  
FAIRWAY RESOURCES, INC. 896/2048, & TPEX EXPLORATION, INC. 128/2048

ASSIGNED EFFECTIVE 12/16/86 FROM FAIRWAY RESOURCES, INC. (896/2048) TO: WELLSTAR CORPORATION  
(896/2048)

ASSIGNED EFFECTIVE 3/19/87 FROM: TPEX EXPLORATION, INC. (128/2048) TO: MURPHY OIL USA, INC.

ASSIGNED EFFECTIVE 3/19/87 FROM: WELLSTAR CORPORATION (896/2048) TO: MURPHY OIL USA, INC.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

12897

3858

## OIL AND GAS MINING LEASE—ALLOTTED INDIAN LANDS

Assiniboine-Sioux

TRIBE, STATE OF

Montana

THIS INDENTURE OF LEASE, made and entered into in quintuplicate this \_\_\_\_\_ day of

19

, by and between

Birdie Lester Vance and Leroy Vance,

wife and husband

2224 1/2 E. 114 St.

of Los Angeles

State of California

(roll No.

), of the

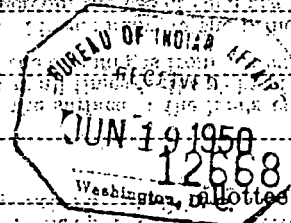
Sioux

Tribe of Indians, designated herein as

lessor, and

C. H. Murphy Jr.,

lessor, and



of El Dorado

State of

Arkansas

herein designated as

lessee,

## WITNESSETH

429.00

1. Lessor, in consideration of a cash bonus of \$ \_\_\_\_\_, paid to the Superintendent of the Indian Agency having jurisdiction, hereinafter called the superintendent, receipt of which is hereby acknowledged, and in consideration of rents and royalties to be paid; and the covenants to be observed as herein set forth, does hereby grant and lease to the lessee the exclusive right and privilege to drill for, mine, extract, remove, and dispose of all the oil and natural gas deposits in or under the following

described tracts of land situated in the county of \_\_\_\_\_, State of \_\_\_\_\_, and more particularly described as follows: \_\_\_\_\_

\_\_\_\_\_ Township, 23 North, Range 51 East, T. 23 N., R. 51 E., S. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 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7. Removal of buildings, improvements, and equipment.—Lessee shall be the owner of and shall have the right to remove from the leased premises, within 90 days after termination of this lease, any and all buildings, structures, casing, material, and/or equipment placed thereon for the purpose of development and operation hereunder, save and except casing in wells and other material, equipment, and structures necessary for the continued operation of wells producing or capable of being produced in paying quantities as determined by the Secretary of the Interior, on said leased land at the time of surrender of this lease or termination thereof; and except as otherwise provided herein, all casing in wells, material, structures, and equipment shall be and become the property of the lessor.

8. Relinquishment of supervision by the Secretary of the Interior.—Should the Secretary of the Interior, at any time during the life of this instrument, relinquish supervision as to all or part of the acreage covered hereby, such relinquishment shall not bind lessee until said Secretary shall have given 30 days written notice. Until said requirements are fulfilled, lessee shall continue to make all payments due hereunder as provided in section 3 (c). After notice of relinquishment has been received by lessee, as herein provided, this lease shall be subject to the following further conditions:

(a) All rentals and royalties thereafter accruing shall be paid in the following manner: Rentals and royalties shall be paid directly to lessor or his successors in title, or to a trustee appointed under the provisions of section 9 hereof.

(b) If, at the time supervision is relinquished by the Secretary of the Interior, lessee shall have made all payments then due hereunder, and shall have fully performed all obligations on its part to be performed up to the time of such relinquishment, then the bond given to secure the performance hereof, on file in the Indian Office, shall be of no further force or effect.

(c) Should such relinquishment affect only part of the acreage, then lessee may continue to drill and operate the land covered hereby as an entirety: *Provided*, That lessee shall pay in the manner prescribed by section 3 (c), for the benefit of lessor such proportion of all rentals and royalties due hereunder as the acreage retained under the supervision of the Secretary of the Interior bears to the entire acreage of the lease, the remainder of such rentals and royalties to be paid directly to lessor or his successors in title or said trustee as the case may be, as provided in subdivision (a) of this section.

9. Division of fee.—It is covenanted and agreed that should the fee of said land now or hereafter be divided into separate parcels, held by different owners, or should the rental or royalty interests hereunder be so divided in ownership, the obligations of lessee hereunder shall not be added to or changed in any manner whatsoever save as specifically provided by the terms of this lease. Notwithstanding such separate ownership, lessee may continue to drill and operate said premises as an entirety: *Provided*, That each separate owner shall receive such proportion of all rentals and royalties accruing after the vesting of his title as the acreage of the fee, or rental or royalty interest, bears to the entire acreage covered by the lease, or to the entire rental and royalty interest as the case may be: *Provided further*, That if, at any time after departmental supervision hereof is relinquished, in whole or in part, there shall be four or more parties entitled to rentals or royalties hereunder, whether said parties are so entitled by virtue of undivided interests or by virtue of ownership of separate parcels of the land covered hereby, lessee, at his election may withhold the payment of further rentals or royalties (except as to the portion due the Indian lessor while under restriction), until all of said parties shall agree upon and designate in writing and in a recordable instrument a trustee to receive all payments due hereunder on behalf of said parties and their respective successors in title. Payments to said trustee shall constitute lawful payments hereunder, and the sole risk of an improper or unlawful distribution of said funds by said trustee shall rest upon the parties naming said trustee and their respective successors in title.

#### DEVELOPMENT OF THE INTERESTS

10. Drilling and producing restrictions.—It is covenanted and agreed that the Secretary of the Interior may impose restrictions as to time or times for the drilling of wells and as to the production from any well or wells drilled when in his judgment such action may be necessary or proper for the protection of the natural resources of the leased land and the interests of the Indian lessor, and in the exercise of his judgment the Secretary may take into consideration, among other things, Federal laws, State laws, or regulations by competent Federal or State authorities or lawful agreements among operators regulating either drilling or production, or both.

11. Unit operation.—The parties hereto agree to subscribe to and abide by any agreement for the cooperative or unit development of the field or area, affecting the leased lands, or any pool thereof, if and when collectively adopted by a majority operating interest therein and approved by the Secretary of the Interior, during the period of supervision.

12. Helium—public emergency.—It is covenanted and agreed that helium gas, carbon dioxide gas, and all other natural gases are included under the term "gas" as used in this lease, and in the event gas is discovered containing helium the United States Government shall have the right to purchase, at reasonable prices, all or any part of the production and to regulate the amount and manner of production; and in time of war or other public emergency, the United States Government shall have the option to purchase all or any part of the products produced under this lease.

13. Conservation.—The lessee in consideration of the rights herein granted agrees to abide by the provisions of any act of Congress, or any order or regulation prescribed pursuant thereto, relating to the conservation, production, or marketing of oil, gas, or other hydrocarbon substances.

14. Heirs and successors in interest.—It is further covenanted and agreed that each obligation hereunder shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors of, or assigns of the respective parties hereto.

IN WITNESS WHEREOF, the said parties have hereunto subscribed their names and affixed their seals on the day and year first above mentioned.

Two witnesses to execution by lessor:

Margaret A. Boyd

P. O. Poplar, Montana

Louis Reddy

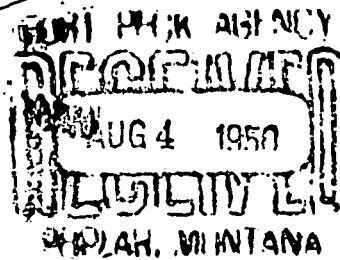
P. O. Bruckton Mont.

X Birdie Lester Vance [SEAL]  
Birdie Lester Vance

X Leroy Vance [SEAL]  
Leroy Vance

*Supt. Diehl*

*Supt. H. Pick  
Agency*



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

206 60807

Contract No.

I-37-1nd-12897  
Our Lease No. 3858

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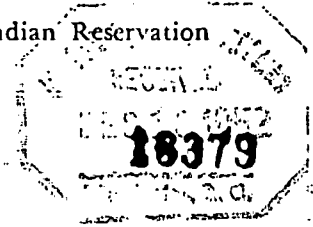
ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior has heretofore approved a certain oil and gas mining lease ~~approved~~  
approved July 31, 1950, entered into by and between Birdie Lester Vance and

Leroy Vance, wife and husband

, lessors,

and C. H. MURPHY, JR. lessee, covering the following described lands in the Fort Peck Indian Reservation  
in the State of Montana, County of Roosevelt:



Township 28 North, Range 51 East N.P.M.  
Sec. 10: NW 1/4 SW 1/4  
Sec. 15: W 1/2 NW 1/4  
Sec. 21: SE 1/4 NE 1/4

AND WHEREAS, the above-described lease is subject to a certain Unit Agreement designated I-Sec. No: 869, approved by the Assistant Commissioner of Indian Affairs on August 22, 1951, and approved by the Acting Director of the United States Geological Survey on August 23, 1951:

NOW, THEREFORE, for and in consideration of TEN AND MORE dollars (\$10.00), the receipt of which is hereby acknowledged, the said C. H. MURPHY, JR., the owner of the above-described lease, hereby bargains, sells, transfers, assigns and conveys all of his right, title and interest in and to said lease, subject to the approval of the Secretary of the Interior, to MURPHY CORPORATION, a Louisiana Corporation of El Dorado, Arkansas, an undivided fifteen thirty-seconds (15/32) interest; to PLACID OIL COMPANY, a Delaware Corporation of Shreveport, Louisiana, an undivided one-half (1/2) interest; and to WILLIAM G. NOLAN AND THEODOSIA M. NOLAN of El Dorado, Arkansas, an undivided one thirty-second (1/32) interest; said assignment to be effective from date of approval hereof by the Secretary of the Interior.

IN WITNESS WHEREOF, the said assignor has hereunto set his hand and seal, this 21st day of

July, 1952

*C. H. Murphy, Jr.*  
C. H. MURPHY, JR.

UNITED STATES

Contract No. I-37-Ind-12897

Lease No. 3858

DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS

206 60807

# ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior has heretofore approved a certain oil and gas mining lease approved July 31, 1950, entered into by and between Birdie Lester Vance et vir

Lessors,

and C. H. MURPHY, JR., Lessee, covering the following described lands in the Fort Peck Indian Reservation in the State of Montana, County of Roosevelt:

Township 28 North, Range 51 East N.P.M.

Sec. 10: NW/4; W/2 SW/4

Sec. 15: W/2 NW/4

Sec. 21: SE/4 NE/4

WITNESSETH

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal this

11th day of November, 1954.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal this 11th day of November, 1954.

WITNESSETH

WHEREAS, the above described lease is subject to a certain Unit Agreement designated I-Sec. No. 869, approved by the Assistant Commissioner of Indian Affairs on August 22, 1951, and approved by the Acting Director of the United States Geological Survey on August 23, 1951; and

WHEREAS, by mesne assignments heretofore approved by the Secretary of the Interior, MARINE OIL COMPANY, an Arkansas Corporation, of El Dorado, Arkansas, is the present owner of an undivided interest in and to the above described lease.

NOW, THEREFORE, for and in consideration of ONE AND MORE dollars (\$1.00), the receipt of which is hereby acknowledged, the said MARINE OIL COMPANY hereby transfers, assigns, and conveys, an undivided one-fourth (1/4) right, title and interest in and to said lease to WILLIAM J. SHERRY of Tulsa, Oklahoma, said assignment to be effective from date of approval hereof by the Secretary of the Interior.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal this 11th day of November, 1954.

MARINE OIL COMPANY

Attest: *[Signature]*  
Assistant Secretary

By *[Signature]*  
Vice President

(OVER)

ACKNOWLEDGMENT OF COMMISSIONER

UNITED STATES

Contract No. I-37-Ind-1289  
Lease No. 385

DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

## ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior has heretofore approved a certain oil and gas mining lease approved dated July 31, 1950, entered into by and between Birdie Lester Vance et vir

and C. H. MURPHY, JR., Lessors, and C. H. MURPHY, JR., Lessee, covering the following described lands in the Fort Peck Indian Reservation in the State of Montana, County of Roosevelt:

**Township 28 North, Range 51 East M.P.M.**

**Sec. 10: NW/4; W/2 SW/4**

**Sec. 15: W/2 NW/4**

**Sec. 21: SE/4 NE/4**

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1951

IX /ALLIANCE /MONTANA/ the said assigned the following to the said and and, app

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geologic of the mineral substance (petroleum and to primary mineral land) which is a (certain) com-  
signatures in said and to the signature of the said and the said and the signature of the  
and of the mineral property which said signature and which is (certain) of the said and the signature of the  
the signature in the said and the signature of the said and the signature of the said

WHEREAS, the above described lease is subject to a certain Unit Agreement designated I-Sec. No. 869, approved by the Assistant Commissioner of Indian Affairs on August 22, 1951, and approved by the Acting Director of the United States Geological Survey on August 23, 1951; and

WHEREAS, by mesne assignments heretofore consummated, WILLIAM J. SHERRY of Tulsa, Oklahoma, is the present owner of an undivided interest in and to the above described lease.

NOW, THEREFORE, for and in consideration of TEN AND MORE dollars (\$10.00), the receipt of which is hereby acknowledged, the said WILLIAM J. SHERRY does hereby bargain, sell, transfer, assign and convey unto MURPHY CORPORATION, a Louisiana Corporation, of El Dorado, Arkansas, an undivided one-fourth (1/4) right, title and interest in and to the lease hereinabove described, said assignment to be effective from date of approval hereof by the Secretary of the Interior.

IN WITNESS WHEREOF, the said assignor has hereunto set his hand and seal, this 5th day of

November, 1954.

William J. Sherry (L.S.)  
WILLIAM J. SHERRY

(OVER)

COPIES OF  
FILE OF

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

Contract No. I-37-Ind-12897  
Our Lease No. 3858

## ASSIGNMENT OF MINING LEASE

WHEREAS, the <sup>approved</sup> Secretary of the Interior has heretofore approved a certain oil and gas mining lease ~~dated~~  
July 31, 1950, entered into by and between Birdie Lester Vance and  
Leroy Vance, wife and husband, lessors,  
and C. H. MURPHY, JR., lessee, covering the following described lands in the Fort Peck Indian Reservation in the  
State of Montana, County of Roosevelt:

**Township 28 North, Range 51 East M.P.M.**  
**Sec. 10: NW/4; W/2 SW/4**  
**Sec. 15: W/2 NW/4**  
**Sec. 21: SE/4 NE/4**

WHEREAS, the above-described lease is subject to a certain Unit Agreement designated I-Sec. No. 869, approved by the Assistant Commissioner of Indian Affairs on August 22, 1951, and approved by the Acting Director of the United States Geological Survey on August 23, 1951;

AND WHEREAS, the Secretary of the Interior has heretofore approved an assignment of an undivided interest in the above-described lease from the said C. H. MURPHY, JR., to MURPHY CORPORATION, a Louisiana Corporation of El Dorado, Arkansas;

NOW, THEREFORE, for and in consideration of TEN AND MORE dollars (\$10.00), the receipt of which is hereby acknowledged, the said MURPHY CORPORATION hereby bargains, sells, transfers, assigns, and conveys, an undivided one-fourth (1/4) right, title and interest in and to said lease to MARINE OIL COMPANY, an Arkansas Corporation, of El Dorado, Arkansas. Said assignment to be effective from date of approval hereof by the Secretary of the Interior.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal, this 16th day of

July, 1954.

Attest:

*Richard L. Durrett*  
Assistant Secretary

Richard L. Durrett

MURPHY CORPORATION

By

*Charles L. Durrett*  
Exploration Manager

(OVER)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved oil and gas mining lease, dated approved July 31, 19 50, entered into by and between Birdie Lester Vance and Leroy Vance, wife and husband, lessor, and C. H. Murphy, Jr., lessee, covering the following-described lands in the Fort Peck Indian Reservation (Insert name of Reservation, Pueblo, Nation, etc., as needed) in the State of Montana, County of Roosevelt: Township 28 North, Range 51 East M.P.M. Section 10: SW/4, W/2 SW/4 Section 15: W/2 NW/4 Section 21: SE/4 NE/4

NOW, THEREFORE, for and in consideration of Ten and more dollars (\$ 10.00 ), the receipt of which is hereby acknowledged, the said Placid Oil Company the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys all of their (50%) right, title, and interest in and to said lease,

subject to the approval of the Secretary of the Interior or his authorized representative to Partnership Properties Co., of 717 Seventeenth St., Denver, Colorado Said assignment to be effective from date of approval hereby by the Secretary of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal, this 20th day of January, 19 82

PAUL W. HICKS, SECRETARY

PLACID OIL COMPANY

G. D. BROWN, PRESIDENT



LEASE No. 17777(78) #42

3-5428  
(August 1961)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

CONTRACT No. I-37 Ind-12897

## ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
Oil and Gas mining lease, dated July 31, 1950,  
 entered into by and between Birdie Lester Vance and Leroy Vance, wife and husband lessor,  
 and C. H. Murphy, Jr. lessee,  
 covering the following-described lands in the Fort Peck Indian Reservation  
(Insert name of Reservation, Pueblo, Nation, etc., as needed)  
 in the State of Montana, County of Roosevelt

Township 28 North, Range 51 East M.P.M.

Section 10: NW/4, W/2 SW/4

Section 15: W/2 NW/4

Section 21: SE/4 NE/4

Now, THEREFORE, for and in consideration of Ten and more  
dollars (\$10.00), the receipt of which is hereby acknowl-  
 edged, the said Partnership Properties Co.  
 the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys  
all of its right, title, and interest in and to said lease,

subject to the approval of the Secretary of the Interior or his authorized representative to Fairway  
Resources, Inc. - 87.5%, TPEX Exploration, Inc. - 12.5%, of 1536 Cole Boulevard, Ste. 2  
Golden, Colorado 80401. Said assignment to be effective from date of approval hereby by the Secretary  
 of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set his hand and seal, this 15<sup>th</sup>  
 day of January, 1985

PARTNERSHIP PROPERTIES, CO.

By: [Signature]

Charles E. Holmes

Attorney-in-fact

5-154e  
(August 1961)

LEASE No. 17777(78)

CONTRACT No. I-37-Ind-12897

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

## ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
 OIL AND GAS mining lease, dated July 31, 19 50,  
 entered into by and between Birdie Lester Vance and Leroy Vance, husband and wife, lessor,  
 and C. H. MURPHY, JR., lessee,  
 covering the following-described lands in the FORT PECK INDIAN RESERVATION  
(Insert name of Reservation, Pueblo, Nation, etc., as needed)  
 in the State of MONTANA, COUNTY OF ROOSEVELT  
 Township 28 North, Range 51 East M.P.M.  
 Section 10: NW/4, W/2 SW/4  
 Section 15: W/2 NW/4  
 Section 21: SE/4 NE/4

Now, THEREFORE, for and in consideration of Ten and more  
 dollars (\$10.00), the receipt of which is hereby acknowl-  
 edged, the said FAIRWAY RESOURCES, INC.  
 the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys  
 ALL OF ITS right, title, and interest in and to said lease,

subject to the approval of the Secretary of the Interior or his authorized representative to  
 WELLSTAR CORPORATION, of 9704 State Highway 66  
 Platteville, CO 80651 Said assignment to be effective from date of approval hereby by the Secretary  
 of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set his hand and seal, this 16th  
 day of SEPTEMBER, 19 86

ATTEST

David Roitman, Secretary

FAIRWAY RESOURCES, INC.

By: *Steven A. Roitman*

Steven A. Roitman, President

(OVER)

LEASE No. 3858

CONTRACT No. I-3712897

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

206 60807

5-1546  
(August 1961)RECEIVED OR FILED  
BUREAU OF INDIAN AFFAIRS  
BUREAU OF LAND MANAGEMENT  
BUREAU OF RECLAMATION  
BUREAU OF MINING  
BUREAU OF GEOGRAPHIC NAMES  
BUREAU OF INDIAN AFFAIRS  
BUREAU OF LAND MANAGEMENT  
BUREAU OF RECLAMATION  
BUREAU OF MINING  
BUREAU OF GEOGRAPHIC NAMES

SEP 10 1 58 PM '88

BRANCH OF REALTY  
TITLES & RECORDS  
SECTION

## ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
Oil and Gas mining lease, dated July 31, 1950,  
entered into by and between Birdie Lester Vance et ux, lessor,  
and C. H. Murphy, Jr., lessee,  
covering the following-described lands in the Fort Peck Reservation  
(Insert name of Reservation, Pueblo, Nation, etc., as needed)  
in the State of Montana

Township 28 North, Range 51 East

Section 10: NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$ Section 15: W $\frac{1}{2}$ NW $\frac{1}{4}$ Section 21: SE $\frac{1}{4}$ NE $\frac{1}{4}$ 

Now, THEREFORE, for and in consideration of Ten dollars and other valuable  
consideration dollars (\$10.00), the receipt of which is hereby acknowl-  
edged, the said Wellstar Corporation  
the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys  
all of its right, title, and interest in and to said lease,

subject to the approval of the Secretary of the Interior or his authorized representative to  
Murphy Oil USA, Inc., of 200 Peach Street,  
71730  
El Dorado, AR Said assignment to be effective from date of approval hereby by the Secretary  
of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set his hand and seal, this 19<sup>th</sup>  
day of Jan, 1987

WELLSTAR CORPORATION

By: Walter Mayer  
Walter Mayer, PresidentBy: Dorothy Mayer  
Secretary

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

LEASE NO. 3858

CONTRACT NO. I-3712897

206 60807

ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
Oil and Gas mining lease, dated July 31, 1950,  
entered into by and between Birdie Lester Vance et ux, lessor,  
and C. H. Murphy, Jr., lessee,  
covering the following-described lands in the Fort Peck Reservation  
(Insert name of Reservation, Pueblo, Nation, etc., as needed)  
in the State of Montana

Township 28 North, Range 51 East

Section 10: NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$

Section 15: W $\frac{1}{2}$ NW $\frac{1}{4}$

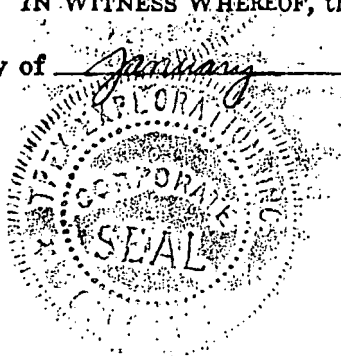
Section 21: SE $\frac{1}{4}$ NE $\frac{1}{4}$

Now, THEREFORE, for and in consideration of Ten dollars and other valuable  
consideration dollars (\$10.00), the receipt of which is hereby acknowl-  
edged, the said TPEX Exploration, Inc.

the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys  
all of its right, title, and interest in and to said lease,

subject to the approval of the Secretary of the Interior or his authorized representative to  
Murphy Oil USA, Inc., of 200 Peach Street,  
El Dorado, AR 71730  
Said assignment to be effective from date of approval hereby by the Secretary  
of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set his hand and seal, this 23rd  
day of January, 1982



TPEX Exploration, Inc.

By:

Hunter S. Swanson, President

(OVER)

AUTHORITY FOR EXPENDITURE -  
 MURPHY CORPORATION - EAST POPLAR UNIT NO. 32  
 SW NE Sec. 15, Twp. 28N., Rge. 51E., Roosevelt Co., Montana

<u>WELL DRILLING &amp; CONSTRUCTION EXPENSE:</u>	<u>TO CSG. PT.</u>	<u>COMP. &amp; EQUIP.</u>	<u>TOTAL COST</u>
Drilling: Footage - 5900' @ \$7.50/ft.	\$ 44,250	\$	\$ 44,250
Daywork - 4 days & 2 days @ \$900/day	3,600	1,800	5,400
Loc. survey, permit & prep.	300		300
Roads, fences, cattleguard, etc.	200	300	500
Mud mat. & chem., incl. oil & gas	4,500		4,500
Drilling bits, baskets, etc.		200	200
Cementing casing	2,050	950	3,000
Coring materials & services	1,000		1,000
Testing services, incl. swabbing	350	125	475
Other logs, surveys & analyses	1,400	650	2,050
Perforating services		600	600
Hydrafrac, acidize, etc. incl. oil		2,200	2,200
Float equip., centralizers, etc.	125	250	375
Trucking, welding & other labor	500	600	1,100
Supervision & Miscellaneous	1,500	750	2,250
Total Est. Well Drlg. & Const. Exp.	59,775	8,425	68,200
<u>WELL EQUIPMENT COSTS:</u>			
Casing: 1000' of 9-5/8" O.D.	3,800		3,800
Casing: 6000' of 5-1/2" O.D.		10,475	10,475
Tubing: 6000' of 2-3/8" O.D.		3,700	3,700
Casing head & connections	300		300
Xmas tree & connections		1,100	1,100
Total Est. Well Equip. Costs	4,100	15,275	19,375
Total Est. Cost of Well	63,875	23,700	87,575
<u>LEASE EQUIPMENT:</u>			
Flow lines, installed		1,200	1,200
Other line pipe, valves & fittings		400	400
Trucking, welding & other labor		800	800
Total Est. Cost of Lease Equip.	-	2,400	2,400
TOTAL EST. COST OF WELL & LEASE EQUIP.	\$ 63,875	\$ 26,100	\$ 89,975

APPORTIONMENT OF TOTAL ESTIMATED COSTS

APPROVAL OF EXPENDITURE

Production Department

Requested by \_\_\_\_\_  
 Date \_\_\_\_\_

Approved by \_\_\_\_\_  
 Date \_\_\_\_\_

Executive Department

Approved by \_\_\_\_\_  
 Date \_\_\_\_\_

Approved

By \_\_\_\_\_

Date \_\_\_\_\_

## SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

### East Poplar Unit H Battery and Wells EPU Nos. 22, 32, 55, 101, & 104

The East Poplar Unit H Battery and the wells producing into the battery, EPU Nos. 22, 32, 55, 101, & 104, are onshore production facilities located in Roosevelt County, Montana, in the East Poplar Unit Oil Field. The field is about 6 miles North-east of Poplar, Montana, in Townships 28 and 29 North and Ranges 50 and 51 East.

The operator of the East Poplar Unit H Lease is Murphy Oil Corporation located at P. O. Box 547, Poplar, Montana 59255. The corporate headquarters are at 200 Jefferson Avenue, El Dorado, Arkansas, 71730.

The battery consists of a 8' x 27' vertical separator, a circulating pump with appropriate lines, and two 300 barrel steel welded tanks. The tanks are vented to the atmosphere and have unrestricted 4" overflow lines between tanks. An earthen pit of about 8,000 barrels capacity is located at the tank battery into which the separator or tanks may be emptied if needed for fluid storage.

All five wells flow and do not need well cellars or overflow pits.

The field flow lines and the well casing of each well are cathodically protected. The equipment is in excellent operating condition and there is no reasonable likelihood of a discharge or spill event.

The facilities are about 3.0 miles from Poplar River. The terrain dips gently West. The soil is sandy and the fields are under cultivation. Because of the distance to the river, the type of soil, and the terrain the 8,000 barrel pit at the tank battery is sufficient secondary containment for these facilities.

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

East Poplar Unit H Battery and Wells EPU Nos. 22, 32, 55, 101, & 104

The East Poplar Unit H Battery and the wells producing into the battery, EPU 22, 32, 55, 101, & 104, are onshore production facilities located in Roosevelt County, Montana, in the East Poplar Unit Oil Field. The battery consists of a 8' x 27' vertical separator, a circulating pump with appropriate lines, and two 300 barrel welded steel tanks. An earthen pit of about 8,000 barrel capacity is located at the tank battery into which the separator or tanks may be emptied if needed for fluid storage.

The field is about 6 miles Northeast of Poplar, Montana, in Townships 28 and 29 North and Ranges 50 and 51 East.

The operator of the East Poplar Unit H Lease is Murphy Oil Corporation located at P.O. Box 547, Poplar, Montana 59255. The corporation headquarters are at 200 Jefferson Avenue, El Dorado, Arkansas 71730.

The foreman, Mr. Gerald Hagadone, is responsible for oil spill prevention at this facility. On each trip to the lease the pumper makes a visual inspection of all facilities and reports any malfunction to the foreman, Mr. Gerald Hagadone, and notes this malfunction on the ten day gauge report. There has been no reportable oil Spill Event during the twelve months prior to January 10, 1974.

The equipment is in excellent operating condition and there is no reasonable likelihood of a discharge or spill event.

The field flow lines and well casing of each well are cathodically protected.

Personnel are properly instructed in the operation and maintenance of equipment to prevent oil discharges, and applicable pollution control laws, rules and regulations. Each employee is given these instructions by the field foreman when they are employed. Scheduled prevention briefings for the operating personnel are conducted frequently enough to assure adequate understanding of the SPCC Plan. The procedures are reviewed every six months by the field foreman with each employee. When changes occur in procedures, each employee is informed.

Fluid in the 8,000 barrel storage pit is pumped to the salt water disposal unit if the water is brackish as determined by chloride tests. If only fresh water is contained in the pit it is disposed of by placing on lease roads to control dust and compact the roads. Any oil in the pit is pumped back through the separator with the water being sent to the disposal well. Oil skims are burned by state permits. There are no outlets from the storage pit and all fluids must be pumped out.

The two 300 barrel tanks are steel and are welded construction. The tanks are vented to the atmosphere and have unrestricted 4" overflow lines between tanks.

All five wells flow and do not need well cellars or overflow pits.

The facilities are about 3.0 miles from the Poplar River. The terrain dips gently West. The soil is sandy and the fields are under cultivation. Because of the distance to the river, the type of soil, and the terrain the 8,000 barrel pit at the tank battery is sufficient secondary containment for these facilities.



The tanks are observed daily by the pumper. Periodically, the foreman checks the entire tank battery and producing wells closely. If any trouble is suspected, the facility is shut down, the tanks and/or separator are emptied and cleaned. The facility is then thoroughly inspected by service company personnel, repairs are made if needed and the unit is placed back into service.

Produced salt water is pumped to a field gathering system for injection into a salt water disposal well. The above ground facilities are observed daily by the pumper and inspected by the foreman closely on his visits to the lease.

All salt water disposal flowlines are cement asbestos lines. These lines are buried and the surface is observed daily by the pumper.

MANAGEMENT APPROVAL

This SPCC Plan will be implemented as herein described.

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

\_\_\_\_\_  
Printed Name Of Registered Professional Engineer

(Seal)

\_\_\_\_\_  
Signature Of Registered Professional Engineer

Date \_\_\_\_\_

Registration No. \_\_\_\_\_ State \_\_\_\_\_

## Contingency Plans For An Oil Discharge

### East Poplar Unit H Battery and Wells EPU Nos. 22, 32, 55, 101, & 104

The field is visited twice daily by the pumper. Visual inspection is made on each facility on each visit to determine if any malfunction is occurring. The most likely potential oil discharges are checked thoroughly. Periodically, the field foreman, Mr. Gerald Hagadone, will conduct a close check of the entire facility.

The pumpers, Mr. Ferdinand Charette and Mr. Robert Atkinson, have been instructed in the operations and maintenance of equipment to prevent oil and water discharges and informed of the applicable pollution control laws, rules and regulations. If an oil discharge occurs, the pumper will immediately close the proper valves and/or shut down the production facility to stop the discharge. He will then call Mr. Gerald Hagadone who will in turn inform Mr. Bill Brown, District Superintendent. If needed, the proper state and federal agencies will be notified by Mr. Brown. The discharged oil will be reclaimed or disposed of by approved engineering procedures and in accordance to law.

In the event discharged oil collects on standing water such as a stock pond or rain water standing in a low spot, the oil will be pumped into a tank truck. The skim of oil left on the water will be removed by an oil skimmer owned by Murphy Oil Corporation. The skimmer can be towed to the field within an hours time.

If the discharge is in excess of 50 barrels of oil, the Montana Department of Health and Environmental Sciences in Helena will be notified by Mr. Brown.

If a Spill Event occurs as defined by federal law, the Environmental Protection Agency in Denver, Colorado will be notified by Mr. Brown.

Telephone numbers and personnel to be notified in case of an oil discharge are as follows:

Phone Numbers as listed on other copies will be included on final copy.

mailed 7-1-70

A.F.E. No. 0-1508-10

AUTHORITY FOR EXPENDITURE  
MURPHY OIL CORPORATION - EAST POPLAR UNIT NO. 32  
SW NE Section 15, T28N, R51E, Roosevelt County, Montana  
(Replace Part Of Flowline)

A.F.E. No. 0-1508-10 is to confirm the estimated cost to replace part of the flowline.

PRESENT STATUS: Well pumping at the rate of 132 BFPD 11 BOPD 121 BWPD 92% BS&W (April, 1970 well test).

PROPOSAL: Change out 2000' of 2" flowline

JUSTIFICATION: 10 leaks have occurred in the flowline since January and all of them have been in the middle of Wheat fields, causing excessive land damage.

ESTIMATED COST

1974' of 2-3/8", J-55, 4.70#, Rg. 2, 8rd. thrd. EUE Tubing, Condition 3	\$ 395.00
Haul, Wrap, Lay and Tie in Flowline	\$ 447.00
Ditch & Backfill	\$ 280.00
Plicoflex & Primer	\$ 100.00
Misc. Labor, Material and Supervision	\$ 75.00
TOTAL ESTIMATED COST	\$1,297.00

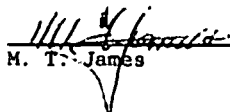
APPORTIONMENT OF TOTAL ESTIMATED COST

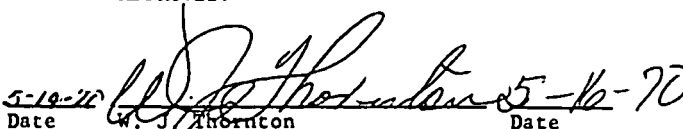
Murphy Oil Corporation	31.448470%	\$ 408.00
Placid Oil Company	33.545035%	\$ 435.00
Humble Oil & Refining Company	16.335860%	\$ 212.00
Phillips Petroleum Company	16.335860%	\$ 212.00
Munoco Company	2.096565%	\$ 27.00
C. F. Lundgren	.238210%	\$ 3.00

APPROVAL OF EXPENDITURE

Requested by:

APPROVED:

  
M. T. James

  
Date 5-14-70 W. J. Thornton Date 5-16-70

MTJ/sb  
May 14, 1970

A.F.E. No. 0-1509-10

AUTHORITY FOR EXPENDITURE  
MURPHY OIL CORPORATION - EAST POPLAR UNIT NO. 32  
SW NE Section 15, T28N, R51E, Roosevelt County, Montana  
(Change Rod String)

A.F.E. No. 0-1509-10 is to confirm the estimated cost to change rods.

PRESENT STATUS: Well pumping at the rate of 132 BFPD 11 BOPD 121 BWPD 92% BS&W (April, 1970 well test).

JUSTIFICATION: This well has parted four times since December, 1969.

ESTIMATED COST

10 Hrs. Pulling Unit Time	\$ 365.00
2875' Condition 2 5/8" Rods and 2675' Condition 2 3/4" Rods	\$1,581.00
Misc. Labor, Material and Supervision	\$ 291.00
Credit for rods from well	(\$ 500.00)
<b>TOTAL ESTIMATED COST</b>	<b>\$1,737.00</b>

APPORTIONMENT OF TOTAL ESTIMATED COST

Murphy Oil Corporation	31.448470%	\$ 546.00
Placid Oil Company	33.545035%	\$ 583.00
Humble Oil and Refining Company	16.335860%	\$ 284.00
Phillips Petroleum Company	16.335860%	\$ 284.00
Munoco Company	2.096565%	\$ 36.00
C. F. Lundgren	.238210%	\$ 4.00

APPROVAL OF EXPENDITURE

Requested by:

APPROVED:

H. W. James  
H. W. James

5-14-70  
Date

W. J. Thornton

Date

MTJ/sb  
May 14, 1970

AUTHORITY FOR EXPENDITURE

MURPHY OIL CORPORATION - EAST POPLAR UNIT NO. 32  
SW NE Section 15, T28N, R51E, Roosevelt County, Montana  
 (Acidize)

PROPOSAL AND JUSTIFICATION: It is proposed to acidize this well with 3000 gallons of 28% retarded acid.

This well was completed in 1954 from the C-3 and treated with 4000 gallons of etching acid. Production has decreased from 180 BFPD 75% BS&W 45 BOPD 135 BWPD since completion to 88 BFPD 5 BOPD 83 BWPD 94% BS&W, January well test. At the present rate this well is uneconomical and before abandonment a stimulation job should be attempted. The core analysis and D.S.T.'s show nothing in the A or B Zones, which are low to any of the surrounding wells. Payout for this job assuming a 15 BOPD increase would be 91 days.

ESTIMATED COST

Pulling Unit, 15 Hrs.	\$ 600
Packer Rental	750
3000 Gallons of Acid and Services	3,000
Misc. Labor, Material and Trucking	200
Total Estimated Cost	\$ 4,550

APPORTIONMENT OF TOTAL ESTIMATED COST

Murphy Oil Corporation	31.448470%	\$ 1,432
Placid Oil Company	33.545035%	1,526
Exxon Company, U.S.A.	16.335860%	743
Phillips Petroleum Company	16.335860%	743
Munoco Company	2.096565%	95
C. F. Lundgren	.238210%	11

APPROVAL OF EXPENDITURE

Requested by:

Approved by:

W. G. Brown  
 W. G. Brown

2-7-73  
 Date

A. W. Simpson 2/21/73  
 A. W. Simpson Date

WGB/sb  
 February 7, 1973

Date Job Completed - 3-11-73  
 Approximate Cost \$4565  
 By W.G. Brown

This job went as planned. The pulling unit and misc. labor was a little over the A.F.E.'d cost but the Baker tickets and Dowell tickets were a little under A.F.E.'d cost. Production has not come up to expectations but will pump for 30 days and re-evaluate WGB

AUTHORITY FOR EXPENDITURE  
MURPHY OIL CORPORATION - EAST POPLAR UNIT NO. 32  
SW NE Section 15, T28N, R51E, Roosevelt County, Montana  
(Perforate the A-Zone)

PROPOSAL and JUSTIFICATION: It is proposed to set a bridge plug and a sack of cement over the C-Zone and perforate the A-2 and A-3 Zones.

July well test indicate that this well is producing at the rate of 104 BFPD 4 BOPD 100 BWPD 96% BS&W which is uneconomical. Prior to abandoning, this well should be tested in the A-Zones. A "Blow-Out" was encountered while drilling at 5617' and was described as Madison oil in character. The depth of 5617' is below the A-Zone but above the B-Zone indicating any oil show would have to be out of the A-Zone. Other A-Zone wells in this area, namely East Poplar Unit No. 1, 3, and 24, have each produced better than 100,000 BO.

ESTIMATED COST

Pulling Unit, 30 Hours	\$ 1,200
Wireline Services, B.P. and Cement	1,250
3000 Gallons of 28% Acid, if needed	4,000
Packer Repair	500
Misc. Labor, Material and Trucking	500
Total Estimated Cost	\$ 7,450

APPORTIONMENT OF TOTAL ESTIMATED COST

Murphy Oil Corporation	31.448470%	\$ 2,343
Placid Oil Company	33.545035%	\$ 2,499
Exxon Company, U.S.A.	16.335860%	\$ 1,217
Phillips Petroleum Company	16.335860%	\$ 1,217
Munoco Company	2.096565%	\$ 156
C.F. Lundgren	2.38210%	\$ 18

APPROVAL OF EXPENDITURE

Requested by:

Approved by:

*W. G. Brown*  
 W. G. Brown

*A. W. Simpson*  
 Date A. W. Simpson Date *10/24/73*

*Date Job Complete 12/24/73*  
*Approx Cost: \$9,640.00*  
*C. Hagadone*



AUTHORITY FOR EXPENDITURE  
MURPHY OIL CORPORATION - EAST POPLAR UNIT NO. 32  
SW NE Section 15, T28N, R51E, Roosevelt County, Montana  
(Supplement No. 1 - Perforate the A-Zone)

This A.F.E. was overspent by \$2,194. Trouble was encountered while hydrotesting the tubing. The rods were badly worn and had to be broken by hand. A joint of tubing was crimped, the tubing had to be pulled and the joint of tubing replaced before the perforating gun could be run. These two facts caused the pulling unit cost to run quite high. The cost of logging this well was not included in the original A.F.E.. Misc. cost for this A.F.E. was also overspent. Trouble was encountered when the well started flowing and had to be killed in order to finish the completion work. Also a hydrotest job was done which was not included in the original A.F.E..

ESTIMATED COST

	Original A.F.E.	Actual Expense	Supplement No. 1
Pulling Unit, 30 Hours	\$ 1,200	\$ 2,613	\$ 1,413
Wireline Services, B.P. & Cement	1,250	2,814	1,564
3000 Gallons of 28% Acid	4,000	3,200	(800)
Packer Repair	500	---	(500)
Misc. Labor, Material and Trucking	500	1,017	517
Total Estimated Cost	\$ 7,450	\$ 9,644	\$ 2,194

APPORTIONMENT OF TOTAL ESTIMATED COST

Murphy Oil Corp.	31.448470%	\$ 2,343	\$ 3,033	\$ 690
Placid Oil Company	33.545035%	2,499	3,235	736
Exxon Company, U.S.A.	16.335860%	1,217	1,575	358
Phillips Pet. Co.	16.335860%	1,217	1,575	358
Munoco Company	2.096565%	156	202	46
C. F. Lundgren	.238210%	18	24	6

APPROVAL OF EXPENDITURE

Requested by:

Approved by:

W. G. Brown  
W. G. Brown

1-12-74  
Date

A. W. Simpson 1/31/74  
A. W. Simpson Date

sb  
January 14, 1974

DATE Job Completed 12/26/72

Approximate Cost \$ 2,194.00

By C. Hagelund RCH

A.F.E. No. 0-1523-10

MURPHY OIL CORPORATION  
AUTHORITY FOR EXPENDITURE - EAST POPLAR UNIT NO. 32  
SW SE Section 31, T29N, R51E, Roosevelt County, Montana

Currently open in A-2 and A-3 (5480-96') with last reliable production test being 4 BOPD and 351 BWPD flowing on 15/64 choke with 250# tubing pressure (8-3-75).

The well is T.A. due to bad flowline. The cost of replacing the 2700' of 2" flowline would pay out in approximately 2-1/2 months at above production rate.

It is proposed to replace the flowline with 2" fiberglass and put well back on production.

ESTIMATED COST

2700' of 2" Silver Thread Fiberglass	\$ 4,650
Roustabout Labor to lay and bury line (3' deep)	\$ 2,700
Supervision and Misc.	\$ 300
Total Estimated Cost	\$ 7,650

APPORTIONMENT OF TOTAL ESTIMATED COST

Murphy Oil Corporation	31.448470%	\$ 2,406
Placid Oil Company	33.545035%	\$ 2,566
Exxon Company, U.S.A.	16.335860%	\$ 1,250
Phillips Petroleum Company	16.335860%	\$ 1,250
Munoco Company	2.096565%	\$ 160
C. F. Lundgren	.238210%	\$ 18

APPROVAL OF EXPENDITURE

Requested by:

Approved by:

Billy G. Melear  
 Billy G. Melear

6-6-80  
 Date

A. W. Simpson 6/16/80  
 A. W. Simpson Date

*Approximate cost*  
*\$ 8040*

BGM/sb  
 June 6, 1980

(0A)

MURPHY EXPLORATION & PRODUCTION CO.  
 AUTHORITY FOR EXPENDITURE  
 EAST POPLAR UNIT NO. 32  
 SW NE SECTION 15, T28N, R51E  
ROOSEVELT COUNTY, MONTANA

PROPOSAL & JUSTIFICATION:

This well was completed in the C-2 or C-3 Zone 5790'-5800'. The last test on this well was 3 BOPD and 63 BWPD. A CIBP was set at 5770'. The A Zones were perforated 5480'-96' and produced 100% water, they are still open. The C-2 was cored to 5815'. The core looks good to 5808'.

It is proposed to drill out the CIBP at 5770', clean out the hole to 5815', perforate C-2 at 5803'-08', set a Model D wireline packer at 5801', swab test and acidize, if necessary.

ESTIMATED COST

Workover Rig -----	\$ 8,000
Wireline and Packer -----	4,200
Acid -----	1,500
Hydrotest -----	1,200
Supervision & Miscellaneous -----	2,100
Total Estimated Cost	\$17,000

APPORTIONMENT OF TOTAL ESTIMATED COST

Murphy Expl & Prod Co.	60.363718%	\$10,262
Doil Oil & Gas	20.965647%	3,564
Exxon Company U.S.A.	16.335860%	2,777
Munoco Company	2.096565%	356
C.F. Lundgren	.238201%	41

APPROVAL OF EXPENDITURE

Requested by:

Approved by:

Raymond Reede  
 Raymond Reede

Date

Sidney Campbell

Date

34p

54 → 94

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
Murphy Exploration & Production Company

3. Address and Telephone No.  
P.O. Box 547, Poplar, MT 59255 (768-3612)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SW NE Section 15, T28N, R51E

5. Lease Designation and Serial No.  
14202564047

6. If Indian, Allottee or Tribe Name  
Ft. Peck

7. If Unit or CA, Agreement Designation  
East Poplar Unit

8. Well Name and No.  
East Poplar Unit #32

9. API Well No.  
05024

10. Field and Pool, or Exploratory Area  
East Poplar Unit

11. County or Parish, State  
Roosevelt  
Montana

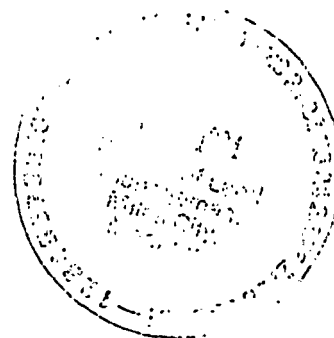
12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log forms.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

EPU No. 32 was producing from the A-2 and A-3 Zone 5480'-5496'.  
It is proposed to set a CIBP at 5400' and pressure test the casing to 300#. We would like to save this well bore while we evaluate some D.O.C. work being done in the area.



14. I hereby certify that the foregoing is true and correct

Signed Raymond Reeder Title District Manager

Date 1-14-94

(This space for Federal or State official use)

Approved by David E. Dwyer Title ADM - Minerals

Date JAN 19 1994

Conditions of approval, if any:

See Attached for  
Conditions of Approval

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

OP

Murphy Exploration & Production Company  
Indian Lease 14-20-256-4047  
East Poplar Unit No. 32  
SW NE Sec. 15, T28N-R51E  
Roosevelt County, Montana

CONDITIONS OF APPROVAL

1. Within 30 days of completing the pressure test on this well you must report the results to this office via Sundry Notice. Please include the actual setting depth of the CIBP, the maximum pressure of the test, length of the test (a minimum of 30 min.), and the pressure loss, if any, observed during the test.
2. Upon successful completion of the casing pressure test, you may apply for a temporary abandoned status (TA) for this well for a period not to exceed one year. Your request for TA status should be included with the Sundry Notice required in #1, above.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.

14202564047

6. If Indian, Allottee or Tribe Name

Ft. Peck

7. If Unit or CA, Agreement Designation

East Poplar Unit

8. Well Name and No.

EPU No. 32

9. API Well No.

05024

10. Field and Pool, or Exploratory Area

East Poplar Unit

11. County or Parish, State

Roosevelt  
Montana

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Murphy Exploration & Production Company

3. Address and Telephone No.

P.O. Box 547, Poplar, MT 59255 (406-768-3612)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SW NE Section 15, T28N, R51E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

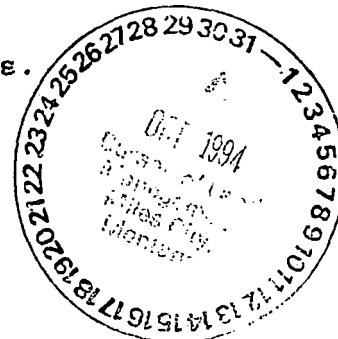
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

10-05-94 Move in rig up pulling unit. Pump 100 barrels corrosion inhibited 10.2# water down casing, 20 barrels down the tubing. Pull tubing and lay down.

10-06-94 Rig up Penkota Wireline run in to 5400' and set 5½" B.P. Rig down.

10-23-94 Pressure casing to 500#'s held for 30 minutes.



14. I hereby certify that the foregoing is true and correct

Signed Raymond Reedle

Title District Manager

Date 10-28-94

(This space for Federal or State office use)

Approved by Mary Alice Spencer

Title ADM - Minerals

Date NOV 1 1994

Conditions of approval, if any:

See Attached for  
Conditions of Approval

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

2P

Murphy Exploration & Production Company  
Indian Lease 14-20-256-4047  
East Poplar Unit Well No. 32  
SW NE Sec. 15, T28N-R51E  
Roosevelt County, Montana

CONDITIONS OF APPROVAL

1. TA status for this well is granted effective November 1, 1994 and will expire November 1, 1995 in accordance with 43 CFR 3162.3-4(c).
2. Approval to extend TA status beyond the expiration date must be requested in writing on or before November 1, 1995.
3. Monthly Reports of Operations must continue to be submitted to the MMS. The status of the well must be reported as TA, and the volume of fluids produced should be reported as zero (0) until the well is returned to production.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Murphy Exploration & Production Company

3. Address and Telephone No.

P.O. Box 547, Poplar, MT 59255 (406-768-3612)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SW NE Section 15, T28N, R51E

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

14202564047

6. If Indian, Allottee or Tribe Name

Ft. Peck

7. If Unit or CA, Agreement Designation

East Poplar Unit

8. Well Name and No.

EPU No. 32

9. API Well No.

25-085-05024

10. Field and Pool, or Exploratory Area

East Poplar Unit

11. County or Parish, State

Roostvelt

Montana

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

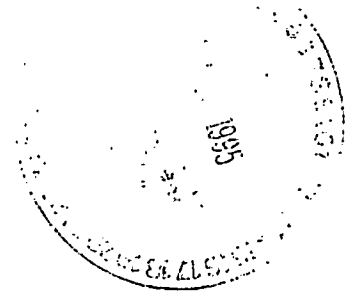
TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Temporarily abandon  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Representations of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

We are in the process of running some 3-D seismographic in the East Poplar Unit and would like to retain the status of temporarily abandoned until the seismograph has been completed and evaluated.



14. I hereby certify that the foregoing is true and correct

Signed Raymond J. Reed

Title District Manager

Date 11-07/95

(This space for Federal or State office use)

Approved by [Signature]  
Conditions of approval, if any See Attached for

Title Acting ADM - Minerals

Date NOV 9 1995

Conditions of Approval

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

OP

Murphy Exploration & Production Company  
Indian Lease 14-20-256-4047  
EPU No. 32  
SW NE Sec. 15, T28N-R51E  
Roosevelt County, Montana

CONDITIONS OF APPROVAL

1. TA status for this well is granted effective November 9, 1995 and will expire November 9, 1996 in accordance with 43 CFR 3162.3-4(c).
2. Approval to extend TA status beyond the expiration date must be requested in writing on or before November 9, 1996.
3. Monthly Reports of Operations must continue to be submitted to the MMS. The status of the well must be reported as TA, and the volume of fluids produced should be reported as zero (0) until the well is returned to production.
4. If this well is returned to production, this office must be notified within 5 working days via Sundry Notice (Form 3160-5), or orally to be followed by a written confirmation.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.

14202564047

6. If Indian, Allottee or Tribe Name

Fort Peck

7. If Unit or CA, Agreement Designation

East Poplar Unit

8. Well Name and No.

EPU No. 32

9. API Well No.

25-085-05024

10. Field and Pool, or Exploratory Area

East Poplar Unit

11. County or Parish, State

Roosevelt  
Montana

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Murphy Exploration & Production Company

3. Address and Telephone No.

P.O. Box 547, Poplar, Mt 59255 406+768-3612

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1980' from the North line and 1980' from the East line  
SW NE Section 15, T28N, R51E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Temp. Abandon</u>	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

We would like to retain this well as temporarily abandoned until our drilling program has been completed and evaluated.

ORIGINAL SIGNATURE BY

14. I hereby certify that the foregoing is true and correct

Signed RAYMOND REEDE

Title District Manager

Date Nov. 20, 1996

(This space for Federal or State office use)

Approved by \_\_\_\_\_  
Conditions of approval, if any:

Title \_\_\_\_\_

Date \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

Murphy Exploration & Production Company  
Indian Lease I-37-IND-13056  
East Poplar Unit  
EPU No. 65  
NW SW Sec. 7, T29N-R51E  
Roosevelt County, Montana

CONDITIONS OF APPROVAL

1. TA status for this well is granted effective November 12, 1996 and will expire November 12, 1997 in accordance with 43 CFR 3162.3-4(c).
2. Approval to extend TA status beyond the expiration date must be requested in writing on or before November 12, 1997.
3. Monthly Reports of Operations must continue to be submitted to the MMS. The status of the well must be reported as TA, and the volume of fluids produced should be reported as zero (0) until the well is returned to production.
4. If this well is returned to production, this office must be notified within 5 working days via Sundry Notice (Form 3160-5), or orally to be followed by a written confirmation.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

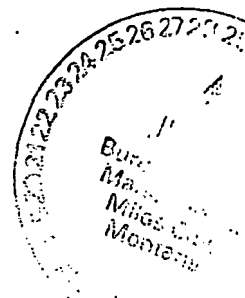
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. 14202564047
2. Name of Operator Murphy Exploration & Production Company		6. If Indian, Allottee or Tribe Name-- Fort Peck
3a. Address P.O. Box 547 Poplar, Mt 59255-0547	3b. Phone No. (include area code) 406+768-3612	7. If Unit or CA/Agreement, Name and/or No. East Poplar Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1980' from the North line and 1980' from the East line SW NE Section 15, T28N, R51E		8. Well Name and No. No. 32
		9. API Well No. 25-085-05024
		10. Field and Pool, or Exploratory Area East Poplar Unit
		11. County or Parish, State Roosevelt County, Montana

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

We would like to retain this well as temporarily abandoned while our seismic data is being re-evaluated.



14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Raymond Reede		Title District Manager
Signature <i>Raymond Reede</i>		Date January 27, 1998

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by <i>Steve M... ..</i>	Title ADM - Minerals	Date FEB 24 1998
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office See Attached for Conditions of Approval		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

OP

Murphy Exploration & Production Company  
Indian Lease 14-20-0256-4047  
EPU No. 32  
SW NE Sec. 15, T28N-R51E  
Roosevelt County, Montana

CONDITIONS OF APPROVAL

1. TA status for this well is granted effective January 15, 1998 and will expire January 15, 1999 in accordance with 43 CFR 3162.3-4(c).
2. Approval to extend TA status beyond the expiration date must be requested in writing on or before January 15, 1999.
3. Monthly Reports of Operations must continue to be submitted to the MMS. The status of the well must be reported as TA, and the volume of fluids produced should be reported as zero (0) until the well is returned to production.
4. If this well is returned to production, this office must be notified within 5 working days via Sundry Notice (Form 3160-5), or orally to be followed by a written confirmation.

## GENERAL RULES

201, 202, 213,

216, 219, 333

TO

## NOTICE!

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

RECEIVED

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA

BILLINGS OR SHELBY

APR 2 1954

## OIL AND GAS CONSERVATION COMMISSION SUNDRY NOTICES AND REPORT OF WELLS

OF THE STATE OF MONTANA - BILLINGS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	XX
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

March 31, 1954

Following is a { ~~notice of intention to do work~~ } on land { ~~owned~~ } described as follows:  
report of work done leased

LEASE BLM-A-029305

MONTANA  
(State)Roosevelt  
(County)East Poplar Unit  
(Field)Well No. 32 Section 15 28N 51E M.P.M.  
(m. sec.) (Township) (Range) Meridian

The well is located 1980 ft. { S. } of N. line and 1980 ft. { E. } of E. line of Sec. 15

The elevation of the derrick floor above the sea level is 2088 K.B.

## READ CAREFULLY

## DETAILS OF PLAN OF WORK

## READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing).

DETAILS OF WORK  
RESULT

Ran 23 joints, 980.55 feet of 9 5/8 inch, J-55, 36 lbs., Range 3, 8 rd. thread American Casing. Landed 12 feet below RKB and set at 992.55 feet. Two HOWCO Centralizers at 783 and 976. Cemented with 390 sacks as follows: 130 sacks of Ideal sack cement and 260 sacks of Ideal regular bulk cement with 2% CaCl in the last 200 sacks. Plug down at 6:15 A.M., 3-24-54. Bumped plug with 800#. Circulated approximately 100 sacks of clean cement. Released pressure. Float held okay.

Approved subject to conditions on

Approved 4-2-54 reverse.  
(Date)

Title Geologist-Engineer

District Office Agent

Company Murphy Corporation

By Harold Milburn  
Title District Production Supt.

Address Box 447, Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Triplicate.

## GENERAL RULES

201, 202, 213,  
216, 219, 233.1

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

## NOTICE!

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

## SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	XXXX
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

April 12, 1954

Following is a { ~~notice of intention to do work~~ } on land { ~~owned~~ } described as follows:  
report of work done leased

LEASE BLM-A-029305-A

MONTANA  
(State)Roosevelt  
(County)East Poplar  
(Field)Well No. 32 S. 1/4 NE Section 15 28N 51E M.P.M.  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. { S } of N line and 1980 ft. { W } of E line of Sec. 15

The elevation of the derrick floor above the sea level is 2088 K.B.

## READ CAREFULLY

## DETAILS OF PLAN OF WORK

## READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing).

DETAILS OF WORK  
RESULT

5617' Drill stem test No. 1, straddle packers 5493 to 5503, total depth 5548. Tool open 3 1/2 hours. Tool opened at 11:10 A.M., 4-8-54, with good blow, increasing to fair blow in 2 1/2 hours. Gas to surface in 3 hours and 20 minutes. Recovered 30' of clean oil and 5165' of salt water. Tool would not close for shut-in pressure. IBHFP-26#; FBHFP-2503#; Hydro-3300, Bottom packer held okay.

RECEIVED

APR 15 1954

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA - BILLINGSApproved 4-15-54  
(Date)

Title Seal Eng

District Office Agent

Company Murphy Corporation

By Harold Meier

Title District Production Supt.

Address Box 447, Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Triplicate.



## GENERAL RULES

201, 202, 213,  
216, 219, 233.1

TO

**NOTICE!**  
THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

RECEIVED

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA

BILLINGS OR SHELBY

APR 15 1954

## SUNDRY NOTICES AND REPORT OF WELLS

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA - BILLINGS

Notice of Intention to Change Plans		Subsequent Report of Water Shut-off	
Notice of Intention to Test Water Shut-off		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Altering Casing	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Redrilling or Repair	
Notice of Intention to Pull or Alter Casing		Subsequent Report of Abandonment	
Notice of Intention to Abandon Well		Supplementary Well History	XXXX
		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

April 14, 1954

Following is a ~~notice of intention to do work~~ report of work done on land ~~owned~~ leased described as follows:

LEASE BLM-A-029305-A

MONTANA  
(State)

(County)

(Field)

Well No. 32 SW NE Section 15 28N 51E M.P.M.  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. { S } of N line and 1980 ft. { W } of E line of Sec. 15

The elevation of the derrick floor above the sea level is 2088 K.B.

## READ CAREFULLY

## DETAILS OF PLAN OF WORK

## READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing).

DETAILS OF WORK  
RESULT

Drill stem test No. 2, straddle packers at 5632 to 5641. Tool open 4 hours, opened at 10:36, 4-12-54, with weak blow, increasing to very weak blow after 1½ hours. Continued throughout test. Recovered 60' gas, 5' clean oil, 565' salt water. IBHFP-15#; FBHFP-220#, 20 minutes BHSIP-2663#; Hydro-3463#. Bottom packer held okay.

Drill stem test No. 3, straddle packers, B-2 Zone, 5642 to 5653. Tool open 4 hours. Tool open at 8:12 A.M., 4-13-54, with very weak blow, increasing slightly after 3 hours. Recovered 30' muddy oil cut salt water, 1920' salt sulphur water. IBHFP-15#; FBHFP-985#; 20 minutes BHSIP-2690#; Hydro-3355#. Bottom packer held okay.

Approved 4-15-54

(Date)

Company Murphy Corporation

By

Title Asst. District Production Supt.

Title

Address Box 447, Poplar, Montana

District Office Agent

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Triplicate.

(SUBMIT IN TRIPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

NOTICE!  
THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	XXX
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

April 16, 1954

Following is a ~~notice of intention to do work~~ report of work done on land ~~owned~~ leased described as follows:

LEASE BIM-A-129305-A

MONTANA Roosevelt Montana  
(State) (County) (Field)

Well No. 32 SW NE Section 15 28N 51E M.P.M.  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. { S. } of N line and 1980 ft. { E. } of W line of Sec. 15

The elevation of the derrick floor above the sea level is 2088 K.B.

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing).

DETAILS OF WORK  
RESULT

Drill stem test #4: Testing C Zone. Total depth 5795 with single packer at 5777'. Tool open 1 hour. Tool opened at 4:10 P.M., 4-15-54, with fair blow, continued throughout test. Recovered 950' gas, 90' clean oil, 45' mud cut oil and 30' oil cut mud with no water. IBHFP-28#; FBHFP-85#; 20 minutes BHSIP-3090#; Hydro-3463#.

APPROVED SUBJECT TO CONDITIONS  
SHOWN ON REVERSE.

RECEIVED

APR 22 1954

Approved 4-28-54  
(Date)

Title Geologist-Engineer

District Office Agent

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA Corporation on  
By M. H. Jensen

Title Ass't. Production Supt.

Address Box 447, Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Triplicate.

## GENERAL RULES

201, 202, 213,  
216, 219, 233.1

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

**NOTICE!**  
THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

## SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	XXXXX
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

April 19, 1954

Following is a ~~notice of intention to do work~~ report of work done on land ~~owned~~ leased described as follows:

LEASE BLM-A-129305-A

MONTANA  
(State)Roosevelt  
(County)Montana  
(Field)Well No. 32 SW NE Section 15 28N 51E M.P.M.  
(m. sec.) (Township) (Range) Meridian

The well is located 1980 ft. { S. } of N line and 1980 ft. { E. } of E line of Sec. 15

The elevation of the derrick floor above the sea level is 2088 K.B.

## READ CAREFULLY

## DETAILS OF PLAN OF WORK

## READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing).

DETAILS OF WORK  
RESULT

Ran 188 joints (5809.10') of 5 $\frac{1}{2}$  inch, J-55, 15.50#, 8 rd. thd., Range 2 American Casing. Set at 5819, Schlumberger Measure. Landed 9.90' below RKB. HOWCO Roto-type Scratchers at 5479 to 5524, 5622 to 5694, and 5780 to 5817. Five HOWCO Centralizers at 5447, 5538, 5652, 5725, and 5802. Halliburton Automatic Fill-up Shoe at 5817 and Halliburton Baffle Collar at 5784. Cemented with 300 sacks of Pozmix. Plug down at 4:25 P.M., 4-17-54. Bumped plug with 1000#, released pressure and float held okay. Rotated pipe freely while cementing.

APPROVED SUBJECT TO CONDITIONS  
SHOWN ON REVERSE.Approved 4-28-54  
(Date)

Title Geologist-Engineer

District Office Agent

RECEIVED

Company 1954 Murphy Corporation

By

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA

District Production Supt.

Address Box 447, Poplar, Montana

NOTE: Reports on this Form to be submitted to the District Agent for Approval in Triplicate.

(SUBMIT IN TRIPLICATE)

## GENERAL RULES

201, 202, 213,  
216, 219, 233.1

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA

BILLINGS OR SHELBY

## NOTICE!

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION

RECEIVED

APR 24 1954

## SUNDRY NOTICES AND REPORT OF WELLS

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA - BILLINGS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	XXXX
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

April 22, 1954

Following is a ~~report of work done~~ on land ~~owned~~ leased described as follows:

LEASE BLM-A-129305-A

MONTANA  
(State)Roosevelt  
(County)Montana  
(Field)Well No. 32 SW NE Section 15 28N 51E N.P.M.  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. { S } of N line and 1980 ft. { W } of E line of Sec. 15

The elevation of the derrick floor above the sea level is 2088 K.B.

## READ CAREFULLY

## DETAILS OF PLAN OF WORK

## READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing).

DETAILS OF WORK  
RESULT

Ran 186 joints (5797.03') of 2 3/8", EUE, J-55, 8 rd. thd., American Tubing. Landed 9.10' below RKB and set at 5768.13' Schlumberger Measure. Displaced water with oil and perforated with Lane Wells Tubing Gun from 5790 to 5800, Schlumberger Measure, with 50 shots. Acidized with 1000 gallons Etching Acid. Formation broke at 2000#. Injected 2.4 barrels per minute at 1600#. Bled down to 1500# at end of job. Acid water to surface in 18 minutes. 10% oil, 90% acid water after 40 more minutes. Now flowing 70 to 90% water at the rate of 100 to 200 barrels of fluid per day open flow with 500# C.P. after 15 hours. Chlorides on water 16,000 PPM.

APPROVED SUBJECT TO CONDITIONS  
SHOWN ON REVERSEApproved 4-26-54  
(Date)Mark P. Thibault  
Title Geologist-Engineer

District Office Agent

Company Murphy Corporation

By Harold Milam  
Title District Production Supt.

Address Box 447, Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Triplicate.

## GENERAL RULES

201, 202, 213,  
216, 219, 233.1

(SUBMIT IN TRIPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

## NOTICE!

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA

## SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	XX
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 5, 1954

Following is a ~~notice of intention to do work~~ report of work done on land ~~owned~~ leased described as follows:

LEASE BLM-A-129305-A

MONTANA  
(State)Roosevelt  
(County)East Poplar  
(Field)Well No. 32 SW NE Section 15 28N 51E M.P.M.  
(m. sec.) (Township) (Range) Meridian

The well is located 1980 ft. { S. } of N line and 1980 ft. { E. } of E line of Sec. 15

The elevation of the derrick floor above the sea level is 2088 K.B.

## READ CAREFULLY

## DETAILS OF PLAN OF WORK

## READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing).

DETAILS OF WORK  
RESULT

Ran 500 gallons of Dowell plugging material. Pressure climbed from 1400 to 3700 with 450 gallons in formation. By-passed 50 gallons up casing and acidized with 3000 gallons of etching acid. Average injection rate 2.7 BPM at 1800#. Flowed spent acid to surface in 7 minutes. Formation fluid in 32 minutes. After cleaning to pits flowed estimated rate of 100 BOPD and 400 BWPD. Open flow.

RECEIVED

MAY 10 1954

APPROVED SUBJECT TO CONDITIONS  
SHOWN ON REVERSE.OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA - BILLINGSApproved 5-10-54  
(Date)Mark P. Aubrey  
Geologist-Engineer

District Office Agent

Company Murphy Corporation

By Harold Miller

Title District Production Supt.

Address Box 447, Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Triplicate.

(SUBMIT IN QUADRUPPLICATE)

TO

NOTICE

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY  
SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement	XX	Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

February 26, 1973

Following is a notice of intention to do work on land leased described as follows:

LEASE East Poplar Unit No. 32

MONTANA (State) Roosevelt (County) East Poplar Unit (Field)

Well No. 32 SW NE Section 15 T28N R51E MPM  
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from N line and 1980 ft. from E line of Sec. 15

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2078' G.L.

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK  
RESULT

East Poplar Unit No. 32 is producing at the rate of 88 BFPD 5 BOPD 83 BWPD 94% BS&W - Uneconomical. This well was completed in the C-3 Zone with perforations at 5790-5800'.

It is proposed to acidize this well with 3000 gallons of 28% retarded acid. A 15 BOPD increase is expected.

Approved subject to conditions on reverse of form

Date 2-28-73

By [Signature] District Office Agent

Title

Company MURPHY OIL CORPORATION

By [Signature]

Title Acting District Superintendent

Address P.O. Box 547, Poplar, Montana 59255

COMMISSION USE ONLY  
API WELL NUMBER

STATE	COUNTY	WELL
2	5	

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

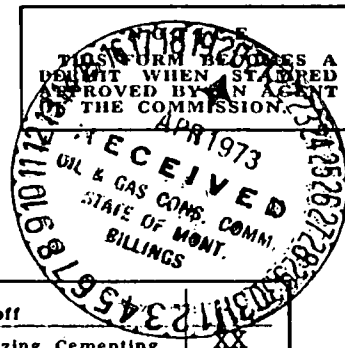
OVER

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

## SUNDRY NOTICES AND REPORT OF WELLS



Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

April 17, 1973

Following is a ~~notice of intention to do work~~ ~~report of work done~~ on land ~~owned~~ ~~leased~~ described as follows:

LEASE.....East Poplar Unit No. 32

MONTANA  
(State)Roosevelt  
(County)East Poplar Unit  
(Field)Well No. 32 SW NE Section 15 T28N R51E MPM  
(m. sec.) (Township) (Range) (Meridian)The well is located 1980 ft. from ~~N~~ ~~XXX~~ line and 1980 ft. from ~~E~~ ~~XXX~~ line of Sec. 15

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2078' G.L.

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK  
RESULT

East Poplar Unit No. 32 was acidized with 3,000 gallons of 28% retarded, inhibited HCL acid as follows: Ran Baker Retrievomatic packer to 5770'. Filled hole, spotted acid 1 joint above packer and set packer. Pressured annulus to 500 PSI, Formation took acid at 3 BPM at 700 PSI and built to 1400 PSI with 34 bbls. in formation. Formation broke back to 1100 PSI with 50 bbls. in formation. Pressure slowly increased to 1200 PSI with all acid in formation. Pressure decreased to 1100 PSI with 20 bbls. overflush in formation.

ISI = 500 PSI 15 Min. S.I. - Vacuum

Workover Potential: 3 Hr. Test Pumped 23.11 BF = 185 BFPD 177 BWPD 7 BOPD  
96% W.C.

Approved subject to conditions on reverse of form

Company MURPHY OIL CORPORATION

Date April 20, 1973

By W. H. Branner

By [Signature] District Office Agent

Title District Superintendent

Address P.O. Box 547, Poplar, Montana 59255

COMMISSION USE ONLY  
API WELL NUMBER

STATE	COUNTY	WELL
25		

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER

**TO**

OIL AND GAS CONSERVATION COMMISSION RECEIVED  
OF THE STATE OF MONTANA OIL & GAS CONSERV. COMM.  
BILLINGS OR SHELBY STATE OF MONT.

## SUNDRY NOTICES AND REPORT OF WELLS

## NOTICE

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement	X	Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
Zone Change	X		

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

November 29 19 73

Following is a notice of intention to do work on land ~~XXXXXX~~ leased described as follows:

LEASE East Poplar Unit No. 32

MONTANA  
(State)

Roosevelt  
(County)

East Poplar Unit  
(Field)

Well No. 32 C SW NE Section 15 T28N R51E MPM  
(m. sec.) (Township) (Range) (Meridian)

The well is located.....1980.....ft. from { ~~xxx~~ <sup>N</sup> } line and .....1980.....ft. from { ~~xxx~~ <sup>E</sup> } line of Sec. ....15

**LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY**

The elevation of the derrick floor above the sea level is 2078' G.L.

**READ CAREFULLY**

### DETAILS OF PLAN OF WORK

**READ CAREFULLY**

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

## DETAILS OF WORK RESULT

At the present time this well is producing at the rate of 104 BFPD 4 BOPD 100 BWPD 96% W.C. which is uneconomical.

A bridge plug will be set with one sack of cement over the C-Zone. The A-Zone will be perforated at 5480-5496' with a thru tubing gun. The A-Zone will be acidized with 3000 gallons of 28% acid, if needed.

Approved subject to conditions on reverse of form

Date: 12-3-73

By John E. Hoff  
District Office Agent

**Title**

Company.....MURPHY OIL CORPORATION

By W. H. Brown

Title District Superintendent

Address P.O. Box 547, Poplar, Montana 59255

COMMISSION USE ONLY  
API WELL NUMBER

STATE 25 COUNTY WELL

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER



## GENERAL RULES

201, 202, 213,  
216, 219, 233.1

(SUBMIT IN QUADRUPPLICATE

TO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

## SUNDRY NOTICES AND REPORT OF WELLS

## NOTICE

THIS FORM BECOMES A  
PERMIT WHEN STAMPED  
APPROVED BY AN AGENT  
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
		Zone Change	X

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

January 18, 1974

Following is a ~~BOOK OF RECORD~~ report of work done on land ~~XXXX~~ leased described as follows:

LEASE East Poplar Unit No. 32

MONTANA  
(State)Roosevelt  
(County)East Poplar Unit  
(Field)Well No. 32 C SW NE Section 15 T28N R51E MPM  
(m. sec.) (Township) (Range) (Meridian)The well is located 1980 ft. from ~~XXX~~ N line and 1980 ft. from ~~XXX~~ E line of Sec. 15

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2078' G.L.

## READ CAREFULLY

## DETAILS OF PLAN OF WORK

## READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK  
RESULT

A 5-1/2" C.I. bridge plug was set at 5770' with 1 sack of cement on top of plug. The A-2 and A-3 Zones were perforated from 5480-5496', 4 holes per foot. The well was acidized as follows: Circ. hole with salt water, set packer, pressure casing to 1000 PSI. Broke formation with 3400 PSI, 1/4 BPM injection Rate. Released pressure and packer. Spotted acid, set packer, and repressured casing to 1000 PSI. Pumped 3000 gallons of 28% HCL with inhibitor, emulsion breaker and sequestering agent added.

Maximum Injection Rate 1-1/2 BPM  
Minimum Injection Rate 1/4 BPM  
ISIP 600#

Maximum PSI 3400#  
Minimum PSI 900#  
10 Min. S.I. 500#

Workover Potential: 24 Hr. Test 213 BFPD 6 BOPD 207 BWPD 97% W.C.

Approved subject to conditions on reverse of form

Company MURPHY OIL CORPORATION

Date Jan 23 1974

By *W. E. Brown*By *Judson D. Smith P.E.*  
District Office Agent Title

Title District Superintendent

Address P.O. Box 547, Poplar, Montana 59251

COMMISSION USE ONLY  
API WELL NUMBER

2	5								
STATE	COUNTY	WELL							

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate  
WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER

2

Form 2  
Rev. 8-92

Submit In Original Duplicate To 1994  
Billings or State Office

# Montana Board of Oil and Gas Conservation

ARM 36.22.307,  
1003, 1004, 1011,  
1013, 1103, 1222,  
1301, 1306, and 1309

## Sundry Notices and Report of Wells

Operator **Murphy Exploration & Production**  
Address **P.O. Box 547**  
City **Poplar** State **MT** Zip Code **59255**  
Telephone Number **(406) 768-3612** Telefax Number **(406) 768-5497**

Lease Name:  
**East Poplar Unit No. 32**

Lease Type (Private/State/Federal):

**Federal**

Well Number:

**32**

Unit Agreement Name:

**East Poplar Unit**

Field Name or Wildcat:

**East Poplar Unit**

Section, Township, and Range:

**Sec. 15, R28N, R51E**

County:

**Roosevelt**

Location of well (1/4-1/4 section and (set) (set) measurements):

**1980' from the North line and 1980' from the East line**

If directionally or horizontally drilled, show both surface and bottom hole locations)

API Number:

**25 085 05024**

State

County

Well

Well Type (oil, gas, injection, other):

**Oil**

Indicate below with an X the nature of this notice, report, or other data:

Notice of Intention to Change Plans ☐  
Notice of Intention to Run Mechanical Integrity Test ☐  
Notice of Intention to Stimulate or to Chemically Treat ☐  
Notice of Intention to Perforate or to Cement ☐  
Notice of Intention to Abandon Well ☐  
Notice of Intention to Pull or Alter Casing ☐  
Notice of Intention to Change Well Status ☐  
Supplemental Well History ☐  
Other (specify) ☐

Subsequent Report of Mechanical Integrity Test ☐  
Subsequent Report of Stimulation or Chemical Treatment ☐  
Subsequent Report of Perforation of Cementing ☐  
Subsequent Report of Well Abandonment ☐  
Subsequent Report of Pulled or Altered Casing ☐  
Subsequent Report of Drilling Waste Disposal ☐  
Subsequent Report of Production Waste Disposal ☐  
Subsequent Report of Change in Well Status ☐  
Subsequent Report of Gas Analysis (ARM 36.22.1222) ☒

### Describe Proposed or Completed Operations:

Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as necessary. Indicate the intended starting date for proposed operations or the completion date for completed operations.

10-05-94 Move in rig up pulling unit. Pump 100 barrels corrosion inhibited 10.2# water down casing, 20 barrels down the tubing. Pull tubing and lay down.  
10-06-94 Rig up Penkota Wireline run in to 5400' and set 5 1/2" B.P. Rig down.  
10-23-94 Pressure csing to 500#'s held for 30 minutes.

### BOARD USE ONLY

Approved NOV 14 1994  
Date

Accepted for record purposes only

Name

Title

The undersigned hereby certifies that the information contained on this application is true and correct:

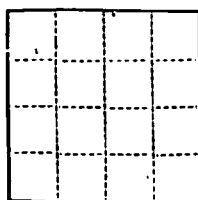
11-02-94

Date

Raymond Reede  
Signed (Agent)

Raymond Reede, District Manager

Print Name & Title



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Billings  
Lease No. NLM-A-029305-A  
Unit East Poplar

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

.....October 27, 1953

Well No. 32 is located 1980 ft. from N line and 1980 ft. from E line of sec. 15

NE 34 (1/4 Sec. and 64. No.) 28N (Twp.) 53E (Range) H. P. M. (Meridian)

East Poplar (Twp.) Lincoln (County of Subdivision) Montana (State or Territory)

The elevation of the derrick floor above sea level is ..... ft. (Not yet run)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Approximately 1000 feet of 7 5/8 inch surface pipe will be set with 450 sacks cement. Total depth is expected to be 5900 feet so as to evaluate the producing section of the Madison Formation. 5 1/2 inch, 15.50 casing will be set for production string.

Adequate blow out preventers will be installed.

APPROVED SUBJECT TO CONDITIONS SHOWN  
ON REVERSE

(G. S. S. S.) H. H. PERRICK

OCT 29 1953

DISTRICT ENGINEER

DATE

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Murphy Corporation

Address Box 147

Poplar, Montana

By Harold Wilson

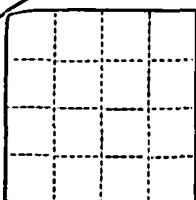
Title District Production Supt.

COPY RETAINED DISTRICT OFFICE  
(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Budget Bureau 42-R358.3.  
Approval expires 12-31-65.

Land Office Billings  
Lease No. BLM-A-029305-A  
Unit East Poplar



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

March 31, 1954

Well No. 32 is located 1980 ft. from [N] line and 1980 ft. from [E] line of sec. 15

SW NE Section 15 28N 51E M.P.M.  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
East Poplar Roosevelt Montana  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 2088 ft. K.B.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work).

Ran 23 joints, 980.55 feet of 9 5/8 inch, J-55, 36 lbs., Range 3, 8 rd. thread American Casing. Landed 12' below RKB and set at 992.55 feet. Two HOWCO Centralizers at 783 and 976. Cemented with 390 sacks as follows: 130 sacks of Ideal sack cement and 260 sacks of Ideal regular bulk cement with 2% CaCl in the last 200 sacks. Plug down at 6:15 A.M., 3-24-54. Bumped plug with 800#. Circulated approximately 100 sacks of clean cement. Released pressure. Float held okay.

Approved APR 2--1954

H. H. Smith  
District Engineer

NOTED - File

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

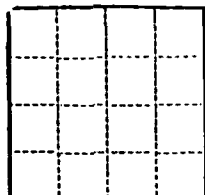
Company Murphy Corporation

Address Box 1417

Poplar, Montana

By Harold Milam

Title District Production Supt.



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Billings  
Lease No. BLM-A-029305-A  
Unit East Poplar

RECEIVED

APR 15 1954

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY..... <b>XX</b>
NOTICE OF INTENTION TO ABANDON WELL.....	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 12, 1954

Well No. 32 is located 1980 ft. from N line and 1980 ft. from E line of sec. 15

SW 1/4 Section 15 28N 51E M.P.M.

East Poplar Roosevelt Montana

The elevation of the derrick floor above sea level is 2088 ft. K.B.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

5617' Drill stem test No. 1, straddle packers 5493 to 5503, total depth 5548. Tool open 3 1/2 hours. Tool opened at 11:10 A.M., 4-8-54, with good blow, increasing to fair blow in 2 1/2 hours. Gas to surface in 3 hours and 20 minutes. Recovered 30' of clean oil and 5165' of salt water. Tool would not close for shut-in pressure. ISHP-264; PHHP-2503, Hydro-3300. Bottom packer held okay.

Approved APR 17 1954  
(Geol. Sgd.) H. H. PENNING  
District Engineer

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Murphy Corporation

Address Box 147

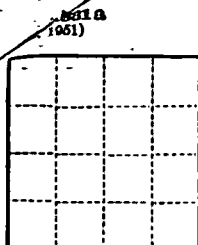
Poplar, Montana

By Harold Mearns

Title District Production Supt.

COPY RETAINED DISTRICT OFFICE

Ref. No 27  
Budget Bureau 42-R358.3  
Approved expires 12-31-55.



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Billings  
Lease No. BLM-A-129305-A  
Unit East Poplar

SUNDRY NOTICES AND REPORTS ON WELLS

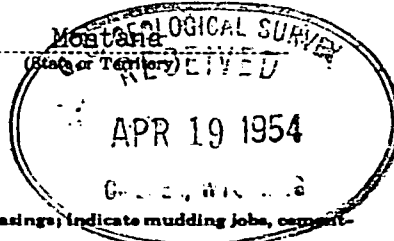
NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	XXX
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 14, 1954

Well No. 32 is located 1980 ft. from ~~XX~~ line and 1980 ft. from ~~XX~~ line of sec. 15

SW NE Section 15 28N 51E M.P.M.  
(4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
East Poplar Roosevelt  
(Field) (County or Subdivision)



The elevation of the derrick floor above sea level is 2088 ft. K.B.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Drill stem test No. 2, straddle packers at 5632 to 5641. Tool open 4 hours, opened at 10:36, 4-12-54, with weak blow, increasing to very weak blow after 1 1/2 hours. Continued throughout test. Recovered 60' gas, 5' clean oil, 565' salt water. IBHFP-15#; FBHFP-220#; 20 minutes BHSIP-2663#; Hydro-3463#. Bottom packer held okay.

Drill stem test No. 3, straddle packers, B-2 Zone, 5642 to 5653. Tool open 4 hours. Tool open at 8:12 A.M., 4-13-54, with very weak blow, increasing slightly after 3 hours. Recovered 30' muddy oil cut salt water, 1920' salt sulphur water. IBHFP-15#; FBHFP-985#; 20 minutes BHSIP-2690#; Hydro-3355#. Bottom packer held okay.

Approved APR 17 1954  
*[Signature]*  
District Engineer

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Murphy Corporation  
Address Box 447  
Poplar, Montana

By *[Signature]*  
Title Ass't. District Production Supt.

(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYLand Office Billings  
Lease No. BLM-1-029305-A  
Unit East Poplar

APR 22 1954

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

..... April 16, 1954

Well No. 32 is located 1980 ft. from N line and 1980 ft. from E line of sec. 15Sec. 15 (Sec. and Sec. No.) 28N (Twp.) 5E (Range) N.P.M. (Meridian)  
East Poplar (Field) Roosevelt (County or Subdivision) Montana (State or Territory)The elevation of the derrick floor above sea level is 2038 ft. K.B.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Drill stem test #1: Testing C Zone. Total depth 5795 with single packer at 5777'. Tool open 1 hour. Tool opened at 4:10 P.M., 4-15-54, with fair blow, continued throughout test. Recovered 950' gas, 90' clean oil, 45' mud cut oil and 30' oil out mud with no water. TBMFP-287; PBMFP-857; 20 minutes BSIP-30208; Hydro-31634.

APR 22 1954

Approved \_\_\_\_\_  
(Orig. Sgd.) M. H. PENNING  
District Engineer

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Murphy Corporation  
Address Box 447  
Poplar, MontanaBy M. H. Penning  
Title Asst. Production Supt.

COPY RETAINED DISTRICT OFFICE

Ref. No. 27  
Budget Bureau 42-R258.1  
Approval expires 12-31-55.

(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Billings  
Lease No. BLM-A-029305-A  
Unit East Poplar

RECEIVED

APR 22 1954

SUNDRY NOTICES AND REPORTS ON WELLS

U. S. GEOLOGICAL SURVEY

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 19, 1954

Well No. 32 is located 1980 ft. from N line and 1980 ft. from E line of sec. 15

SW NE Section 15 28N 51E M.P.M.  
(4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
East Poplar Roosevelt  
(Field) (County or Subdivision)  
Montana  
(State or Territory)

The elevation of the derrick floor above sea level is 2088 ft. K.B.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Ran 188 joints (5809.10!) of 5 1/2 inch, J-55, 15.50#, 8 rd. thd., Range 2 American Casing. Set at 5819; Schlumberger Measure. Landed 9.90' below RKB. HOWCO Roto-type Scratchers at 5479 to 5524, 5622 to 5694, and 5780 to 5817. Five HOWCO Centralizers at 5447, 5538, 5652, 5725, and 5802. Halliburton Automatic Fill-up Shoe at 5817 and Halliburton Baffle Collar at 5784. Cemented with 300 sacks Pozmix. Plug down at 4:25 P.M., 4-17-54. Bumped plug with 1000#, released pressure, and float held okay. Rotated pipe freely while cementing.

Approved APR 22 1954

*H. H. Lewis*  
District Engineer

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Murphy Corporation

Address Box 447

Poplar, Montana

By *Harold M. ...*

Title District Production Supt.



COPY RETAINED DISTRICT OFFICE

Ref. No. 27  
Budget Bureau 43-R358.1  
Approval expires 12-31-55.

(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Billings  
Lease No. BLM-A-029305-A  
Unit East Poplar

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 22, 1954

Well No. 32 is located 1980 ft. from N line and 1980 ft. from E line of sec. 15

SW NE Section 15 28N 51E M.P.M.  
(4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
East Poplar Roosevelt  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 2088 ft. K.B.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Ran 186 joints (5797.03') of 2 3/8", EUE, J-55, 8 rd. thd., American Tubing. Landed 9.10' below RKB and set at 5768.13' Schlumberger Measure. Displaced water with oil and perforated with Lane Wells Tubing Gun from 5790 to 5800, Schlumberger Measure, with 50 shots. Acidized with 1000 gallons Etching Acid. Formation broke at 2000#. Injected 2.4 barrels per minute at 1600#. Bled down to 1500# at end of job. Acid water to surface in 18 minutes. 10% oil, 90% acid water after 40 more minutes. Now flowing 70 to 90% water at the rate of 100 to 200 barrels of fluid per day open flow with 500# C.P. after 15 hours. Chlorides on water 16,000 PPM.

Approved APR 26 1954

[Signature]  
District Engineer

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

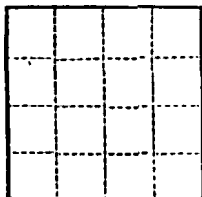
Company Murphy Corporation

Address Box 447

Poplar, Montana

By [Signature]

Title District Production Supt.



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Billings  
Lease No. BLM-A-029305-A  
Unit East Poplar

SUNDRY NOTICES AND REPORTS ON WELLS

RECEIVED

MAY 10 1954

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	XX
NOTICE OF INTENTION TO ABANDON WELL.....		

RECEIVED

MAY 11 1954

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA - BILLINGS

Well No. 32 is located 1980 ft. from N line and 1980 ft. from E line of sec. 15

SW 1/4 Section 15 28 N 51 E H.P.M.  
(Sec. and Subsec. No.) (Twp.) (Range) (Meridian)  
East Poplar Bozeman Montana  
(Field) (County of Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 2088 ft. K.B.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Run 500 gallons of Dowell Plugging Material. Pressure climbed from 1400 to 3700 with 450 gallons in formation. By-passed 50 gallons up casing and acidized with 3000 gallons of etching acid. Average injection rate 2.7 BPM at 1800#. Flowed spent acid to surface in 7 minutes. Formation fluid in 32 minutes. After cleaning to pits flowed estimated rate of 100 BOPD and 400 BWPD. Open flow.

Approved MAY 10 1954  
(Orig. Sgd.) H. H. PERRIGO

District Engineer

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Murphy Corporation  
Address Box 447  
Poplar, Montana

By Harold Wilson

Title District Production Supt.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back this different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐  
2. NAME OF OPERATOR  
**Murphy Oil Corporation**  
3. ADDRESS OF OPERATOR  
**P.O. Box 547, Poplar, Montana 59255**  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

MAR 1 1973

Billings, Montana

5. LEASE DESIGNATION AND SERIAL NO.  
**BLM-A-029305-A**  
6. IF INDIAN, ALLOTTED OR TRIBE NAME  
**Fort Peck**  
7. UNIT AGREEMENT NAME  
**East Poplar Unit**  
8. FARM OR LEASE NAME  
**East Poplar Unit**  
9. WELL NO.  
**No. 32**  
10. FIELD AND POOL, OR WILDCAT  
**East Poplar Unit**  
11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA  
**SW NE Section 15, T28N, R51E.**  
12. COUNTY OR PARISH  
**Roosevelt**  
13. STATE  
**Montana**

1980' from the North line and 1980' from the East line

14. PERMIT NO.  
15. ELEVATIONS (Show whether DP, RT, GR, etc.)  
**2078' G.L.**

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input checked="" type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

East Poplar Unit No. 32 is producing at the rate of 88 BFPD 5 BOPD 83 BWPD 94% BS&W - Uneconomical. This well was completed in the C-3 Zone with perforations at 5790-5800'.

It is proposed to acidize this well with 3000 gallons of 28% retarded acid. A 15 BOPD increase is expected.

18. I hereby certify that the foregoing is true and correct

SIGNED ORIGINAL SIGNED BY L. C. LOEGERING TITLE Acting District Superintendent DATE February 26, 1973

(This space for Federal or State office use)

(ORIG. SGD.) VIRGIL L. PAULI  
APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DISTRICT ENGINEER

DATE

3-2-73

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

BLM-A-029305-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Fort Peck

7. UNIT AGREEMENT NAME

East Poplar Unit

8. FARM OR LEASE NAME

East Poplar Unit

9. WELL NO.

No. 32

10. FIELD AND POOL, OR WILDCAT

East Poplar Unit

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA

C SW NE Section 15

T28N, R51E

12. COUNTY OR PARISH

Roosevelt

13. STATE

Montana

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Murphy Oil Corporation

3. ADDRESS OF OPERATOR

P.O. Box 547, Poplar, Montana 59255

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface

1980' from the North line and 1980' from the East line

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, ST, GR, etc.)

2078' G.L.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐  
☐  
☒  
☐

PULL OR ALTER CASING

☐  
☐  
☐  
☐

FRACTURE TREAT

MULTIPLE COMPLETION

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
☐  
☐  
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

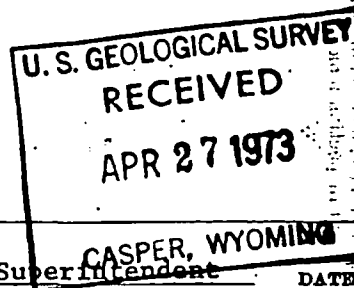
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting, any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

East Poplar Unit No. 32 was acidized with 3,000 gallons of 28% retarded, inhibited HCL acid as follows: Ran Baker Retrieromatic packer to 5770'. Filled hole, spotted acid 1 joint above packer and set packer. Pressured annulus to 500 PSI. Formation took acid at 3 BPM at 700 PSI and built to 1400 PSI with 34 bbls. in formation. Formation broke back to 1100 PSI with 50 bbls. in formation. Pressure slowly increased to 1200 PSI with all acid in formation. Pressure decreased to 1100 PSI with 20 bbls. overflush in formation.

It is proposed to acidize this well with 3000 gallons of 28% retarded, inhibited HCL acid.

ISI = 500 PSI 15 min. S.I. = Vacuum

Workover Potential: 3 Hr. Test Pumped 23.11 BF = 185 BFPD 177 BWPD 7 BOPD  
96% W.C.



18. I hereby certify that the foregoing is true and correct

SIGNED W. H. Brauer

TITLE District Superintendent

DATE April 17, 1973

(This space for Federal or State office use)

APPROVED BY W. H. Brauer  
CONDITIONS OF APPROVAL, IF ANY:

TITLE DISTRICT ENGINEER

DATE 4-24-73

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLA  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 42-R1424.

6. LEASE DESIGNATION AND SERIAL NO.

BLM-A-029305-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Fort Peck

7. UNIT AGREEMENT NAME

East Poplar Unit

8. FARM OR LEASE NAME

East Poplar Unit

9. WELL NO.

No. 32

10. FIELD AND POOL, OR WILDCAT

East Poplar Unit

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREAC SW NE Section 15,  
T28N, R51E

12. COUNTY OR PARISH

Roosevelt

13. STATE  
Montana

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	RECEIVED
2. NAME OF OPERATOR Murphy Oil Corporation	DEC 3 1973
3. ADDRESS OF OPERATOR P.O. Box 547, Poplar, Montana 59255	Billings, Montana
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface	

1980' from the North line and 1980' from the East line

14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, OR, etc.) 2078' G.L.
----------------	--

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input checked="" type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other) Change Zones	<input type="checkbox"/>		<input checked="" type="checkbox"/>

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)	<input type="checkbox"/>		<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) \*

At the present time this well is producing at the rate of 104 BFPD 4 BOPD 100 BWPD 96% W.C. which is uneconomical.

A bridge plug will be set with one sack of cement over the C-Zone. The A-Zone will be perforated at 5480-5496' with a thru tubing gun. The A Zone will be acidized with 3000 gallons of 28% acid, if needed.

18. I hereby certify that the foregoing is true and correct

SIGNED W. E. BrownTITLE District SuperintendentDATE November 29, 1973

(This space for Federal or State office use)

APPROVED BY SCD VIRCH I PAUL  
CONDITIONS OF APPROVAL, IF ANY:TITLE DISTRICT ENGINEERDATE 12-5-73

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

BLM-A-029305-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Fort Peck

7. UNIT AGREEMENT NAME

East Poplar Unit

8. FARM OR LEASE NAME

East Poplar Unit

9. WELL NO.

No. 32

10. FIELD AND POOL, OR WILDCAT

East Poplar Unit

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREAC SW NE Section 15,  
T28N, R51E

12. COUNTY OR PARISH

Roosevelt

13. STATE

Montana

SUNDRY NOTICES AND REPORTS ON WELLS  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Murphy Oil Corporation

3. ADDRESS OF OPERATOR

P.O. Box 547, Poplar, Montana 59255

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

1980' from the North line and 1980' from the East line

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

2078' G.L.

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETION ☐ABANDON\* ☐CHANGE PLANS ☐

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☒(Other) ☐

Zone Change

REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT\* ☐☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

A 5-1/2" C.I. bridge plug was set at 5770' with 1 sack of cement on top of plug. The A-2 and A-3 Zones were perforated from 5480-5496', 4 holes per foot. The well was acidized as follows: Circ. hole with salt water, set packer, pressured casing to 1000 PSI. Broke formation with 3400 PSI, 1/4 BPM injection rate. Released pressure and packer. Spotted acid, set packer, and repressured casing to 1000 PSI. Pumped 3000 gallons of 28% HCL with inhibitor, emulsion breaker and sequestering agent added.

Maximum Injection Rate 1-1/2 BPM

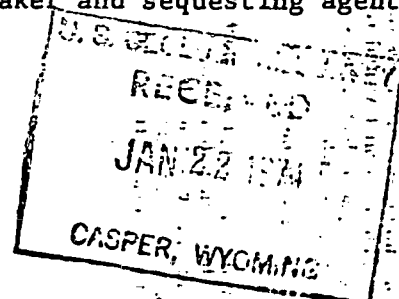
Minimum Injection Rate 1/4 BPM

Maximum PSI 3400#

Minimum PSI 900#

ISIP 600#

10 Min. S.I. 500#



Workover Potential: 24 Hr. Test 213 BFPD 6 BOPD 207 BWPD 97% W.C.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

District Superintendent

DATE

January 18, 1974

(This space for Federal or State office use)

DISTRICT ENGINEER

APPROVED BY

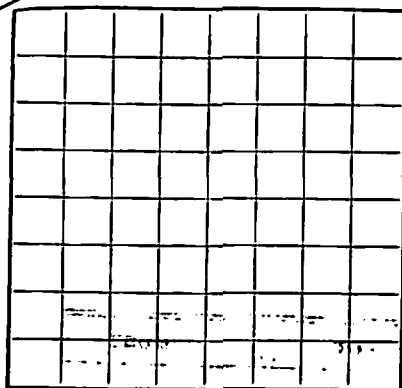
TITLE

DATE

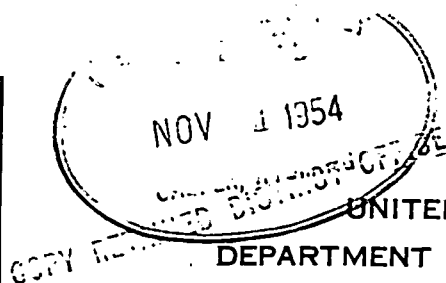
1-21-74

CONDITIONS OF APPROVAL, IF ANY:

27,7

U. S. LAND OFFICE *Billings*  
SERIAL NUMBER *BLM-A 29305-A*  
LEASE OR PERMIT TO PROSPECT .....

LOCATE WELL CORRECTLY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
FORMATION RECORD

TOTAL DEPT

## LOG OF OIL OR GAS WELL

Company MURPHY CORPORATION Address B-13 Behner Bldg, Billings, Montana  
 Lessor or Tract ..... Field East Poplar State Montana  
 Well No. 32 Sec. 15 T. 28N R. 51E Meridian M.P.M. County Roosevelt  
 Location 1980 ft. [S.] of N. Line and 1980 ft. [W.] of E. Line of Section 15 Elevation 2088 KB  
 (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon  
 so far as can be determined from all available records.

Signed

*Harold Milam*

Harold Milam

Date November 2, 1954Title Dist. Production Superintendent

The summary on this page is for the condition of the well at above date.

Commenced drilling March 22, 1954. Finished drilling April 21, 1954.

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5497 to 5503 No. 4, from 5792 to 5812  
 No. 2, from 5636 to 5645 No. 5, from ..... to .....  
 No. 3, from 5654 to 5666 No. 6, from ..... to .....

## IMPORTANT WATER SANDS

No. 1, from ..... to ..... No. 3, from ..... to .....  
 No. 2, from ..... to ..... No. 4, from ..... to .....

## CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
9-5/8"	36	8	Nat'l	980.55'	Howco				
5-1/2"	25.50	8	Nat'l	580.10'	Howco				

## HISTORY OF OIL OR GAS WELL

## MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	992.55'	390	Pump & Plug		
5-1/2"	5819'	300	Pump & Plug		

## PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....  
 Adapters—Material ..... Size .....



TO  
OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA  
BILLINGS OR SHELBY

WELL COMPLETION REPORT  
(NEW WELLS ONLY)

Owner MURPHY CORPORATION Field East Poplar  
 Street B-13 Behner Building Pool East Poplar  
 City Billings State Montana County Roosevelt  
 Lease Name BLM-A 129305-A Well No. 32 Acres in Unit         
 Location SW NE Sec. 15 Twp. 28N Range 51E Elevation 5088 KB  
 Permit No.        Electric Log Run 3-23-54 & 4-16-54, 19         
 Number of crude oil producing wells on this lease, including this well       

DATA ON TEST

Dates Test Commenced October 24, 1954 Hour 7A.M. Date Test Completed October 25, 1954 Hour 7A.M.  
 Length of Test 24 Hours        Minutes       

For Flowing Well:

Flowing pressure on Csg        Lbs./Sq. In.  
 Flowing pressure on Tbg        Lbs./Sq. In.  
 Size Tbg        In. No. Ft. Run         
 Size choke        inches. Make choke         
 Length        In. Shut in pressure       

For Pumping Well:

Length of stroke used 64 inches  
 Number of strokes per minute 16  
 Size of working barrel 1 1/2 inches  
 Size Tbg 2-3/8 In. No. Ft. run 5768

If Flowing Well, was this well flowed for the entire duration of this test without the use of swab or other artificial flow device?  
41 If jetted, used        Cu. Ft. gas per Bbl. oil. Result of this test (Bbls. net oil per 24 hours.)  
       (100% tank tables.)

Gas-Oil ratio of this well is negligible Cu. Ft. of gas per Bbl. of oil.

Per cent of water produced during this test 82%

Gravity of oil produced during this test (corrected to A. P. 1. 60° F.) 40.4

Name of pipe line or other carrier East Poplar Unit Gathering System

If Shot:

Date this well ~~was~~ perforated or treated 5-21-54 No. Qts. used       

If Perforated:

No. 50 Size 1/2"

If Acidized:

No. Gals. used 1000 gallons etching acid       

Formation shot, perforated or treated Madison 5790 Ft. to 5800 feet.

Shooting, perforating or treating company Land Wells & Dowell

Bbls. of oil produced from this well since shot or treatment to time test was started 802

Date well completed April 21, 1954 Hour well completed 2:00 P.M.

Top of pay 5790 Ft. Total depth of well 5821 Ft.

CASING RECORD

Size	Put In Well Feet Inches	Pulled Out Feet Inches	Left In Well Feet Inches	No. Sacks Cement Used	Packers	Float Collars and Shoes
9-5/8"	992.55'	RECEIVED NOV 3 1954		390		Howco
5-1/2"	5819'			300		Howco
		OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF MONTANA - BILLINGS				

Agent's address B-13 Behner Building  
Billings, Montana

MURPHY CORPORATION

(Name of Owner)

Harold Milson Dist. Prod. Supt.

(Signature)

(Title)

Phone 2-2131

LOG OF WELL

Show all formation, especially all sands and character and contents thereof. Describe Cores. On other side—

OVER

SEE ATTACHED SHEETS

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# C O M P L E T I O N   D A T A

## CASING:

3-22-54: T.D. 1015' Ran 23 joints (980.55') of 9 5/8", J-55, 36#, 5rd thd., R-3, Class "A" American casing. Landed 12' below R.K.B. and set at 992.55'. Ran two Howco centralizers at 783' and 976'. Cemented with 130 sacks of Ideal sack cement and 260 sacks of Ideal bulk cement with 2% Gc31 in the last 200 sacks. Plug down at 6:15 A.M., 3-24-54. Dumped plug with 800#. Circulated approximately 100 sacks of clean cement. Released pressure, float held ok.

4-18-54: T.D. 5521' Ran 128 joints (5809.10') of 5 1/2", J-55, 15.50#, 5rd thd., R-2, American casing. Landed 9.90' below R.K.B. and set at 5819'. Howco roto-type scratchers at 5479-5524', 5622-5694' and 5780-5817'. Five Howco centralizers at 5447', 5538', 5652', 5725' and 5802'. Halliburton automatic fill-up shoe at 5817' and Halliburton baffie collar at 5784'. Cemented with 300 sacks of Pozmix. Plug down at 4:25 P.M., 4-19-54. Dumped plug with 1000#. Released pressure, float held ok. Pipe rotated freely while cementing. Tested 5 1/2" casing with 1000# for 30 minutes. No leaks. Found top of plug at 5781'.

## COMPLETION:

4-19-54: PBTD 5821' Kippling up.

4-20-54: PBTD 5812' Drilled plug and cement.

4-21-54: PBTD 5812' Ran 186 joints (5797.93') of 2 3/8" tubing and landed 9.10' below R.K.B. and set at 5768.13'. Displaced water with oil and perforated with Lane Wells tubing gun from 5790-5800' with 50 shots. Acidized with 1000 gallons of etching acid. Formation broke at 2000#. Injected 2 1/2 BBL at 1500#. Bled down to 1500' at end of job. Acid water to surface in 16 minutes; 10% oil, 90% acid water after 40 more. Flowing 70-90% water at the rate of 100-200 BFPD. Open flow CP 500#. Chlorides of water 16,000 PPM.

4-22-54: PBTD 5812' Flowing to tank at the rate of 100-200 BFPD. CP 625#, TP 125#. 60-80% water. Chlorides 13,000 PPM.

4/23-24/54: PBTD 5812' Moving off rig. SICP 825#, SITP 350#.

4-25-54: PBTD 5812' On a 24-hour test flowed 94.76 BFPD, 95% water.

4/26-27/54: PBTD 5812' Shut In.

4-28-54: PBTD 5812' Flowed 108.20 barrels fluid with 5.41 barrels oil in 15 1/2 hours. CP 1175#, TP 200#.

4-29-54: PBTD 5812' Would not flow into tank battery. Open flow to pits 100 BFPD, 12% oil.

Completion Data Continued

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4-30-54: PBFD 5812' Shut In.

5-1-54: PBFD 5812' Shut In.

5-2-54: PBFD 5812' Ran 500 gallons Dowell plugging material. Pressure climbed from 1400# to 3700# with 450 gallons in formation. Bypassed 50 gallons up casing and acidized with 3000 gallons etching acid. Average injection rate 2.7 BPM at 1800#. Flowed spent acid to surface in 7 minutes, formation fluid in 32 minutes. After cleaning to pits, flowed at estimated rate of 100 BOPD and 400 EAPD. Open flow.

5/3-6/54: PBFD 5812' Testing.

5-7-54: PBFD 5812' Open flow. 4.75 BPPH, 88% water. CP 600#, TFP 75%.

To drop from report.

Completion Data Continued (Tubing Record)

TUBING:

4-19-51: Ran 187 joints (5790.11') of 2 3/8", EWE, 4.70#, J-55, P-2 American tubing, open ended with collar on bottom.

Landed below R.F.B.	9.10
Top jt. 2 3/8" tubing	31.34
185 jts. 2 3/8" tubing, open ended with collar on bottom	<u>5727.69</u>
Bottom of tubing	5768.13'

## ELECTRO LOG DATA

## TAPE OF LOG

## INTERVAL LOGGED

Schlumberger Electrical Survey 2"  
 Schlumberger Electrical Survey 5"  
 Schlumberger Microlog 5"  
 Schlumberger Microlog 24"

77'-5820'  
 2000'-5820'  
 2000'-5818'  
 5300'-5818'

## LOG TOPS

	<u>Depth</u>	<u>Datum</u>	<u>Thickness</u>
Judith River	767	+1521	
Eagle	1161	+ 927	
Wichrara	2023	+ 65	
Greenhorn	2362	- 271	
Graneros	2570	- 432	
U. Muddy	2723	- 635	
Muddy	2950	- 862	
Skull Crk.	2983	- 895	
Dakota Silt	3112	-1054	
Morrison	3197	-1109	
Swift	3588	-1500	
Rierson	3918	-1830	
Piper Sh.	4270	-2182	
Piper ls.	4350	-2262	
Gypsum Sprgs.	4401	-2313	
Spearfish	4600	-2512	
Amadon	4820	-2732	
Heath	4848	-2760	
Otter	5000	-2912	
Kibbey Sd.	5110	-3052	
Kibbey ls.	5295	-3207	
Madison	5387	-3299	
A-1	5472	-3384	3'
A-2	5480	-3392	1'
A-3	5490	-3402	7'
A-4	5497	-3409	33'
B-1	5636	-3548	8'
B-2	5654	-3566	17'
B-3	5676	-3588	6'
B-4	5707	-3619	6'
B-5	5714	-3636	?
C-1	5781	-3693	?
C-2	5792	-3704	10'

# DRILL STEM TESTS

DST #1, 5493-5509, straddle packers, tool open 3½ hours; tool opened at 11:10 AM, 4-8-54 with good blow, decreasing to fair blow in 2½ hours. Gas to surface in 3 hours and 20 minutes. Recovered 30' clean oil, 5165' salt water. Tool would not close for shut-in pressure. IBHFP: 26# FBHFP: 2503# Hydro: 3330#. Bottom packer held okay.

DST #2, 5552-5641, straddle packers, tool open 4 hours; tool opened at 10:36, 4-12-54, with weak blow, decreasing to very weak blow after 1½ hours which continued throughout test. Recovered 60' gas, 5' clean oil, 565' salt water. IBHFP: 15# FBHFP: 220# (20 Min.) IHSIP: 2663# Hydro: 3463#. Bottom packer held okay.

DST #3, 5642-5653, straddle packers, tool open 4 hours; tool opened at 8:12 AM, 4-13-54, with very weak blow, increasing slightly after 3 hours. Recovered 30' muddy oil cut with salt water, 1920' salt sulphur water. IBHFP: 15# FBHFP: 985# (20 min.) BHSIP: 2690# Hydro: 3355#. Bottom packer held okay.

DST #4, 5777-5795, single packer, tool open 1 hour; tool opened at PM, 4-15-54, with fair blow which continued throughout test. Recovered 950' gas, 90' clean oil, 45' mud cut oil, and 30' oil cut mud with no water. IBHFP: 28# FBHFP: 85# (20 min.) BHSIP: 3091# Hydro: 3463#.

# CORE ANALYSIS REPORTS

Sample No.	Representative of Feet	Midpoint of Sample	Footage	Permeability		Effective Porosity Percent	Density		Saturation % of Porespace	
				Radial	Vert.		Bulk	Matrix	Resid. Oil	Water
	CORE #1	5490-5548	Recovered 58'							
N.S.	5490-92									
1	92-93		1	0.06	0.52	0.5	2.72	2.73	Tr.	90.8
2	93-94		1	U.T.	U.T.	0.1	2.71	2.71	Tr.	94.9
3	94-95		1	0.05	0.09	1.5	2.67	2.71	0.0	29.3
4	95-96		1	0.05	0.03	1.6	2.66	2.71	0.0	38.8
5	96-97		1	0.36	0.19	4.1	2.59	2.71	0.0	16.3
6	97-98		1	0.37	7.1	1.2	2.67	2.71	7.5	79.7
7	98-99		1	0.09	0.36	2.6	2.65	2.72	7.7	72.3
8	5499-5500		1	U.T.	4.2	1.7	2.68	2.72	Tr.	84.5
9	5500-01		1	60.	4.9	2.6	2.65	2.72	Tr.	46.5
10	01-02		1	1.2	0.24	2.8	2.63	2.71	3.6	33.2
11	02-03		1	1.3	0.88	2.6	2.65	2.72	0.0	15.8
N.S.	03-25									
N.S.	25-29.5									
N.S.	29.5-33									
N.S.	33-48									



CORE ANALYSIS REPORTS Cont'd

Sample No.	Representative of Feet	Midpoint of Sample	Footage	Permeability		Effective Porosity Percent	Density		Saturation % of Pore Space	
				Radial	Vert.		Bulk	Matrix	Resid. Oil	Water
	CORE #2 5629-62	Recovered	33'							
N.S.	5629-30.5		2.5							
12	30.5-31.5		1	1.1	0.24	6.5	2.52	2.70	0.9	91.4
13	31.5-33		1.5	3.0	2.0	14.8	2.26	2.66	Tr.	81.8
14	33-34.5		1.5	8.4	3.3	2.0	2.62	2.67	Tr.	87.4
15	34.5-35.5		1	2.0	1.2	9.1	2.45	2.70	5.3	22.0
16	35.5-36.5		1	6.6	4.5	7.5	2.43	2.63	11.5	84.7
17	36.5-37.5		1	19.	4.6	13.1	2.32	2.67	10.3	62.6
18	37.5-38.5		1	1.9	0.87	6.6	2.46	2.63	3.7	93.3
N.S.	38.5-48		9.5							
19	48-49		1	5.2	7.3	8.8	2.40	2.63	13.1	39.8
20	49		1	6.0	3.7	12.4	2.29	2.62	0.7	94.4
21	50		1	1.1	0.63	8.1	2.46	2.67	1.2	70.4
22	51-53		2	3.4	2.5	9.3	2.41	2.66	Tr.	52.7
23	53		1	6.2	3.2	5.1	2.55	2.68	Tr.	51.0
24	54		1	3.1	1.1	6.9	2.48	2.66	Tr.	53.6
25	55		1	3.7	1.1	7.8	2.51	2.68	Tr.	46.2
26	56		1	0.70	0.21	3.5	2.58	2.67	Tr.	45.7
27	57-58		1	87.	1.8	3.0	2.59	2.67	Tr.	26.7
28	58-60		2	87.	5.0	5.0	2.55	2.68	0.0	60.0
29	60-61		1	0.86	0.32	9.8	2.43	2.69	0.0	88.2
30	61-62		1	3.9	3.3	12.4	2.36	2.69	0.0	43.5

## CORE ANALYSIS REPORTS Cont'd

Sample No.	Depth, Feet	Effective Porosity	Permeability Millidarcies		Saturation % Pore Space	
		% Porosage	Horiz.	Vert.	Resid. Oil	Total Water
	CORE #3 5782-95 Recovered 39'					
N.S.	5755-81					
31	5781-82	4.6	-0.01		5.0	52.2
32	5782-83	0.2	0.04		0.0	90.0
33	83-84	0.3	-0.01		Tr.	96.7
34	84-85	9.6	0.07		0.0	90.8
35	85-86	1.3	-0.01		39.2	53.5
36	86-87	0.6	-0.01		0.0	92.5
37	87-88	0.5	-0.01		0.0	86.4
38	88-89	0.3	-0.01		0.08	88.7
39	89-90	2.8	-0.01		29.8	61.3
40	90-91	4.8	0.01		23.3	75.3
41	91-92	3.9	0.01		10.5	61.3
42	92-93	15.0	0.10		23.4	49.5
43	93-94	16.7	0.13		1.3	69.4

CORE ANALYSIS REPORTS Cont'd

CORE #1 5795-5815 Recovered 20'										
Sample No.	Representative of Feet	Midpoint of Sonole	Footage	Permeability		Effective Porosity Percent	Density		Saturation % of Pore Space	
				Radial	Vert.		Bulk	Matrix	Bound. Oil	Water
	CORE #1 5795-5815 Recovered 20'									
44	5795-96			0.02	5000/	7.2	2.53	2.73	18.3	68.1
45	96-97			0.06	5000/	9.0	2.46	2.70	28.4	31.4
46	97-98			3.5	0.47	9.7	2.44	2.70	36.5	35.7
47	5798-5800			1.1	5000/	15.6	2.27	2.69	30.6	42.5
48	5800-01			0.29	0.34	12.5	2.38	2.72	25.0	70.6
49	01-02			0.31	0.25	14.2	2.31	2.69	34.6	49.3
50	02-03			0.71	0.65	15.6	2.27	2.69	23.6	38.6
51	03-04			0.25	0.48	13.8	2.36	2.73	44.3	41.4
52	04-05			0.23	0.34	12.7	2.33	2.67	43.6	34.6
53	05-06			0.35	5000/	30.7	1.85	2.68	18.5	17.6
54	06-07			0.09	0.18	7.6	2.50	2.70	29.1	70.8
55	07-08			-0.01	0.06	0.3	2.68	2.69	28.6	68.0

0-9-62

## CORE DESCRIPTIONS

Core No. 1, 5490-5548, recovered 58%:

C. T. 10, 21, 34, 30, 28/ 31, 42, 23, 20, 24/ 26, 21, 22,  
22, 23/ 18, 16, 23, 20, 18/ 33, 26, 18, 17, 25/ 23,  
25, 17, 16, 20/ 36, 25, 23, 16, 21/ 17, 17, 19, 13,  
11/ 11, 11, 12, 15, 25/ 13, 13, 13, 24, 11/ 16, 12,  
20, 21, 18/ 22, 23, 23

5493.3336  
Core #1  
AZONE

2'0" Anhydrite, light gray, microcrystalline, hard, dense.  
No Show.

4'0" Limestone, dark gray, amorphous, hard, dense, except  
for several tight vertical fractures, dull golden-  
yellow fluorescence and slight oil odor along fracture  
planes, otherwise no show.

7'0" Limestone, dark gray, amorphous, numerous fairly  
tight vertical fractures with a fair oil odor and  
spotty greenish-yellow fluorescence; no show in  
matrix.

8'6" Limestone, dark brown to gray, very fine crystalline,  
highly fossiliferous, thin stylolites scattered  
throughout; unit looks wet. No show.

15'6" Limestone, medium brownish-gray, oolitic, very porous  
and permeable, crumbly; unit looks wet. No Show.

4'6" Anhydrite, light gray, microcrystalline, dense; hori-  
zontal partings filled with dark brown, amorphous  
limestone. No Show.

5'0" Dolomite, medium brownish-gray, amorphous, slightly  
porous, questionably permeable, argillaceous in lower  
two feet. No Show.

11'0" Anhydrite, medium gray, amorphous, hard, dense. No  
Show.

Core No. 2, 5629-5682, recovered 33%:

C. T. 14/ 16, 13, 14, 14, 13/ 12, 10, 9, 7, 15/ 17, 16, 17,  
14, 16/ 22, 14, 20, 13, 14/ 12, 15, 15, 14, 17/ 14,  
16, 18, 15, 18/ 16, 16

1'6" Anhydrite, medium gray to black, microcrystalline,  
hard and dense. No Show.

# CORE DESCRIPTIONS Cont'd

- 5632-3 3/4  
Core #2 B-1
- 3'0" Limestone, medium brown, fine crystalline, many small dark calcite crystals, fair porosity, questionable permeability, fair oil odor, spotty bright golden-yellow fluorescence and good oil stain throughout; single fairly tight vertical fracture in upper one foot; slight oil stain and spotty golden-yellow fluorescence on fracture planes.
- 1'0" Limestone, dark gray, amorphous, dense, except for numerous short irregular fractures, slight oil odor and spotty medium golden-yellow fluorescence on fracture planes. No show in matrix.
- 3'6" Limestone, dark gray, microcrystalline, hard, fair to good porosity and permeability, fair oil odor, spotty dull yellow fluorescence in matrix; bleeding oil in upper one foot.
- 5635-38 1/2
- 9'6" Anhydrite, light to medium dark gray, microcrystalline, hard and dense, numerous short, irregular black dolomitic shale partings. No Show.
- 3'6" Limestone, medium brown, fine crystalline, fair porosity and permeability, styrolitic, fair oil odor, spotty bright golden-yellow fluorescence; bleeding oil in top one foot.
- 5648-57  
Core #3 B-2
- 1'6" Limestone, medium to dark brown, fine crystalline, fair porosity and permeability, slight oil odor, spotty golden fluorescence, few scattered short, tight, vertical fractures, several thin alternating dense and porous zones in lower one and one-half feet.
- 5657-61 1/2

Core No. 3, 5755-5795, recovered 39':

- G. T. 15, 21, 27, 27, 27/22, 22, 23, 24, 25/ 34, 19, 13, 23, 21/ 12, 17, 17, 17, 18/ 15, 11, 12, 13, 20/ 14, 17, 15, 17, 19/ 10, 17, 15, 12, 13/ 15, 10, 10, 15, 32
- 0'6" Limestone, dark gray, amorphous, dense, anhydritic. No Show.
- 5'6" Dolomite, medium gray, amorphous, hard and dense. No Show.
- 6'0" Limestone, dolomitic, medium gray, amorphous, hard and dense. No Show.
- 2'0" Limestone, medium gray, amorphous, hard and dense; inclusion of light gray dolomite. No Show.

COPE DESCRIPTIONS cont'd

3'6" Limestone, slightly dolomitic, medium to dark gray, amorphous, dense. No Show.

1'0" Limestone, medium gray, amorphous, dense, translucent of anhydrite. No Show.

1'6" Shale, black, slightly dolomitic, pyritic.

2'0" Limestone, medium brownish-gray, amorphous, hard, dense, except for several short, irregular, fairly tight fractures, spotty golden fluorescence and oil stain on fracture planes.

5'6" Limestone, medium gray, microcrystalline, thin alternating porous and dense zones, fair spotty yellow fluorescence and odor in porous zones.

5'0" Limestone, medium brown, very fine crystalline, slightly porous and permeable, open vertical fracture through unit; slight oil odor and spotty dull fluorescence in matrix; even bright golden fluorescence and good oil odor along fracture planes.

2'0" Limestone, dark brownish-gray, very fine crystalline, fair porosity and permeability, several open vertical fractures through unit, good oil stain, odor and even medium golden fluorescence in matrix and on fracture planes; fractures extend into unit above.

Core No. 4, 5795-5815, recovered 20'0"

G. T. 10, 15, 12, 12, 8, 23, 11, 10, 11, 16, 8, 17, 15, 27, 27, 23, 25, 27, 21, 24

5777-05  
Core #4  
C-2000  
5795-  
5807 1/2

12'6" Limestone, dark brownish-gray, very fine crystalline, fair porosity and permeability, several fairly tight vertical fractures, good oil stain, odor and even bright golden-yellow fluorescence in matrix and along fractures; fractures extend into unit above.

7'6" Limestone, dark gray, amorphous, hard and dense. No Show.

# MUD PROGRAM SUMMARY

## MUD ADDITIVES USED:

Aquagel.....	106 sacks	Barifon.....	4 sacks
Carbonox.....	43 sacks	Discoose.....	13 sacks
Caustic Soda.....	6 cans	Baroid.....	1021 sacks
Fibertex.....	3 sacks	Deframer.....	4 cans
Hulls.....	14 sacks	(Five gallon cans)	
Micentex.....	1 sack	Lignox.....	107 sacks
Srenton.....	1 sack	Lime.....	107 sacks
Soda Ash.....	17 sacks	Tannex.....	15 sacks
Zacgal.....	104 sacks	Crude Oil.....	35 bbls.

Mud Cost.....\$6111.87

Drayage.....\$ 377.86

TOTAL MUD COST: \$6489.73

## SUMMARY:

Drilled surface hole to 802 feet with 10.2# per gallon mud. At this point gas began to break through; circulated and mixed mud to 11.1# per gallon and 62 second viscosity. Finished drilling the surface hole at a depth of 1015 feet. Ran Schlumberger Electrical Survey, and then ran 23 joints (980.55') of 9 5/8" casing without difficulty.

Drilled out from under the surface casing to approximately 4000 feet with water and some gel. At this point a lime-lignox emulsion mud program was started and it was maintained to a depth of 5617 feet with additions of lime, lignox, carbonox, caustic soda, tannex and crude oil. At 5617 feet the well blew out and caught fire while the mud was 10.5# per gallon and 180 second viscosity. Because of the blow-out there was approximately 13% excess oil in the mud, and the mud was extremely gas fluffed. Baroid was added to bring the weight to 11#/gallon and tergardol was added to remove the gas from the mud. Discoose and lignox were added to emulsify the excess oil; even so, after each trip there was oil on top of the pits. The well was drilled from 5617 feet to a total depth of 5821 feet with a weight of 11.0# to 11.2#/gallon and 55 to 70 second viscosity. Hulls were added before casing the C Zone in order to prevent loss of circulation. A small amount of mud was lost continuously from 5755 feet until the 5 1/2" casing was cemented. Four cores and four drill stem tests were run without further difficulties. Ran Schlumberger Electrical Survey and Micro-log before setting 5800 feet of 5 1/2" casing.

# MUD SUMMARY Cont'd

Mud characteristics while drilling were as follows:

Depth	Height	Viscosity	Water Loss	pH
900	11.1	62	---	---
3571	10.1	38	---	---
4025	10.3	52	---	---
4232	10.0	56	10.5	12
4690	10.4	65	15.0	12
4959	10.6	65	10.6	12
5247	10.7	56	12.4	11.5
5490	10.6	60	12.6	12
5641	11.2	66	9.4	12
5815	11.0	74	8.0	13

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# DRILLING BIT AND TOTCO RECORDS

Run No.	Make	Size	Type	Ser. No.	From	To	Depth	Degrees Off
1	Hughes	12 1/4	OSC-J	Re-tip	0	461		
2	Hughes	12 1/4	OSC-3J	13020	461	1015		
3	Hughes	8 3/4	OSC-3J	11647	1015	2952	1767	3/4
4	Hughes	8 3/4	OSC-3J	81542	2952	3412	3402	3/4
5	Hughes	8 3/4	OWV	52620	3412	3710		
6	Hughes	8 3/4	OWV	52077	3710	4132	3743	1
7	Hughes	8 3/4	OWV	52661	4132	4448	4110	2
8	Hughes	8 3/4	OWV	52081	4448	4678	4427	2 3/4
9	Hughes	8 3/4	OWV	52072	4678	4910	4660	1/2
10	Hughes	8 3/4	OWV	80553	4910	4989		
11	Hughes	8 3/4	OWC	65201	4989	5247		
12	Hughes	8 3/4	OWV	54814	5247	5387		
13	Hughes	8 3/4	OWV	42666	5387	5490		
14	Hughes	8 3/4	OWV	42674	5490	5629		
15	Hughes	8 3/4	OWV	52667	5629	5548		
16	Hughes	8 3/4	OWV	42674	5548	5755		
17	Hughes	8 3/4	OWC	80549	5755	5815 TD		

## DIAMOND CORE BIT RECORD

Core No.	Make	Size	Ser. No.	From	To	Footage
1	Christianson	6 1/2"	V-421	5490	5548	58
2	Christianson	6 1/2"	V-421	5629	5662	33
3	Christianson	6 1/2"	V-421	5755	5795	40
4	Christianson	6 1/2"	V-421	5795	5815	20
Total Footage						151

## SAMPLE DESCRIPTION

- 2200-2370 Shale, medium gray, silty; siltstone, light gray, micaceous; trace of shale, grayish-brown, white specks, calcareous; some sandstone, light gray, very fine grained, micaceous, glauconitic, calcareous.
- 2370 Sample Top Greenhorn.
- 2370-2425 Shale, grayish-brown, white specks, calcareous; shale, light gray, silty; trace of brown amorphous limestone.
- 2425-2540 Shale, gray, white specks as above; shale, dark gray, micaceous.
- 2540-2720 Shale, dark gray as above; shale, light gray, silty.
- 2720 Sample Top Upper Muddy.
- 2720-2850 Trace of sandstone, light gray, very fine grained, poorly cemented, micaceous; shale, medium to dark gray, micaceous, slightly glauconitic.
- 2850-2970 Shale, as above.
- 2970 Sample Top Muddy.
- 2970-3040 Sandstone, light gray, very fine grained, glauconitic, micaceous; shale as above.
- 3040-3100 Shale, light to medium gray, micaceous.
- 3100 Sample Top Dakota.
- 3100-3260 No samples.
- 3260-3540 Sandstone, light gray, very fine grained; shale, medium gray; shale, dark gray.
- 3540-3580 Shale, as above; trace of sandstone as above.
- 3580 Sample Top Swift.
- 3580-3720 Sandstone, light gray, very fine grained, glauconitic, calcareous; some dark gray shale.
- 3720-3780 Trace of sandstone as above; shale, dark and medium gray.

SAMPLE DESCRIPTION Cont'd

- 3780-3820 Shale, medium to dark gray; shale, brown, micaceous.
- 3820-3910 Shale, light greenish-gray, calcareous; shale, brownish-gray; some dark gray shale.
- 3910 Sample Top Member.
- 3910-4010 Sandstone, light gray, very fine grained, fairly well cemented, calcareous; shale, light gray, calcareous; shale, medium gray.
- 4010-4100 Shale, light greenish-gray, calcareous; shale, medium gray; some dark gray shale.
- 4100-4120 Shales as above; trace of light brown, granular limestone.
- 4120-4140 As above; limestone, medium brown, amorphous, very argillaceous.
- 4140-4220 As above; trace of sandstone, light gray, very fine grained, glauconitic, calcareous.
- 4220-4260 Limestone, tan, amorphous, dense; shale, light greenish-gray, calcareous; shale, medium gray; shale, dark gray.
- 4260 Sample Top Figer Shale.
- 4260-4310 Shale, brick red; shale, medium greenish-gray, calcareous.
- 4310-4350 As above; trace of limestone, medium brown, amorphous, dense; trace of white anhydrite.
- 4350 Sample Top Figer Limestone.
- 4350-4390 Limestone, medium to dark brown, amorphous, dense; trace of light and dark gray shale.
- 4390-4400 Limestone, medium brown, very arenaceous; some limestone as above; shale as above.
- 4400 Sample Top Gypsum Springs.
- 4400-4420 Shale, light greenish-gray, calcareous; shale, medium gray; some limestone as above.
- 4420-4520 Shales, as above; trace of red shale; some tan amorphous limestone.
- 4520-4530 Shale, light greenish-gray, calcareous; shale, dark gray; shale, red; trace of green shale; trace of light gray limestone.

# SAMPLE DESCRIPTION CONT'D

- 4684-4685 Shale, greenish-gray, calcareous; shale, dark gray; limestone, tan, amorphous, dense; some white anhydrite.
- 4686 Sample Top Bearfish
- 4688-4689 Shale, red, very silty; shale, greenish-gray, calcareous; anhydrite, white; shale, medium to dark gray.
- 4690-4691 Sandstone, red, very fine grained, slightly calcareous; anhydritic; some shale and anhydrite as above; occasional trace of buff, amorphous limestone.
- 4692 Sample Top Aspid.
- 4693-4710 Dolomite, pink, microcrystalline, dense, slightly anhydritic; shale, brick red; shale, medium gray, calcareous; some dark gray shale.
- 4710-4740 As above; siltstone, red, sandy, calcareous, anhydritic.
- 4750-4760 Trace of dolomite and shale as above; limestone, light gray, microcrystalline, dense; shale, light gray, calcareous.
- 4770-4780 Limestone and shale as above; shale, red and purple.
- 4820-4830 Limestone, medium brown, microcrystalline; shales, red, gray (calcareous) and purple.
- 4852 Sample Top Heath.
- 4860-4870 Shale, as above; sandstone, red, fine grained, fairly well cemented, tight, calcareous.
- 4880-4890 Shale, as above.
- 4900-4970 As above; trace of tan, amorphous limestone.
- 4970-4980 No sample.
- 4980-4990 Shale, medium to dark gray; shale, red.
- 5022 Sample Top Otter.
- 5022-5030 Trace of bright green shale; limestone, tan, microcrystalline, dense; shale, dark gray; shale, red.
- 5030-5070 Limestone, light grayish-brown, pseudo-colitic; limestone, light gray, microcrystalline; shales, red and gray as above.

SAMPLE DESCRIPTION Cont'd

- 5070-5133 Limestone, light brownish-gray, microcrystalline, dense; shale, dark gray; trace of red shale.
- 5133 Sample Top Kibbey Sandstone.
- 5133-5230 Sandstone, red, very fine grained, fairly well cemented, anhydritic, calcareous; shale, light greenish-gray; shale, dark gray.
- 5230-5295 Some sandstone as above; shale, red, gray, purple and black.
- 5295 Sample Top Kibbey Limestone.
- 5295-5310 Limestone, tan, amorphous, dolomite inclusion, dense; some sandstone and shale as above.
- 5310-5340 Sandstone, red, very fine grained, medium sorting, fairly well cemented, slightly calcareous, anhydritic; shale, medium grayish-green, calcareous; trace of limestone as above.
- 5340-5400 Shale, dark gray to black; some shale as above; some sandstone as above.
- 5400 Sample Top Madison.
- 5400-5430 Anhydrite, medium brownish-gray, microcrystalline, dense; shale, medium gray; shale, red; trace of sandstone as above; shale, black.
- 5430-5450 As above; some limestone, light brown, amorphous, dense.
- 5450-5490 Limestone, medium brown, pseudo-colitic, slightly porous; anhydrite, white, amorphous, soft; shale, red and dark gray.
- 5490-5548 Core No. 1, recovered 58 feet.
- 5548-5570 Limestone, medium brown, amorphous, dense; limestone, brown, fine crystalline, granular, porous; shale, red and medium gray; some anhydrite; trace of tan amorphous dolomite.
- 5570-5620 Shale, red and gray; some anhydrite; trace of limestone, amorphous, brown, dense.
- 5620-5629 Dolomite, tan, microcrystalline, slightly granular; limestone, dark brown, amorphous; shale as above.
- 5629-5662 Core No. 2, recovered 33 feet.

SAMPLE DESCRIPTION Cont'd

5662-5690 No samples.

5690-5755 Anhydrite, light gray, soft; dolomite, medium grayish-brown, crystalline; limestone, medium brown, very fine crystalline, dense.

5755-5795 Core No. 3, recovered 39 feet.

5795-5815 Core No. 4, recovered 20 feet.

TOTAL DEPTH: SLM 5816' equals 5821' Schlumberger

ELECTRO LOG DATA

<u>Type of Log</u>	<u>Interval Logged</u>
Electrical Survey-----	77'-1015' 1015'-5820'
Microlog-----	2000'-5818'

-----

<u>Formation</u>	<u>Schlumberger Tops</u>
Judith River-----	765 (+1323)
Eagle-----	1161 (+ 927)
Niobrara-----	2023 (+ 65)
Greenhorn-----	2362 (- 274)
Graneros-----	2570 (- 482)
Muddy-----	2950 (- 862)
Dakota Silt-----	3142 (-1054)
Morrison ?-----	3497 (-1409)
Swift ?-----	3518 (-1428)
Rierdon-----	3917 (-1829)
Piper Shale-----	4265 (-2177)
Piper Limestone-----	4350 (-2282)
Spearfish-----	4600 (-2512)
Amsden-----	4712 (-2624)
Heath-----	4850 (-2782)
Otter-----	5000 (-2912)
Kibbey Sandstone-----	5140 (-3052)
Kibbey Limestone-----	5293 (-3205)
Madison-----	5386 (-3298)

EAST POPLAR UNIT WELL #32  
SW NE Section 15-T28N-R51E  
Roosevelt County, Montana

- April 9, 1954: D.S.T. #1. Tool open 3½ hours. Opened with good blow; decreased to fair blow in 2½ hours. Gas to surface in 3 hours 20 minutes. Recovered 30' clean oil, 5165' salt water. Tool would not close for shut in pressure. IBHFP: 26#, FBHFP: 2503#, Hydro: 3330#. Bottom packer held okay. Reamed core hole and drilled to 5617'. Mud weight: 10.5#. Viscosity: 180.
- April 13, 1954: D.S.T. #2. Tool open 4 hours, opened with weak blow decreasing to very weak blow after 1½ hours, that lasted throughout test. Recovered 60' gas, 5' clean oil, 565' salt water. IBHFP: 15#, BHSIP: 2663#, FBHFP: 220#, Hydro: 3463#. Shut in 20 minutes.
- April 14, 1954: D.S.T. #3. Tool open 4 hours, shut in 20 minutes. Opened with very weak blow, increasing slightly after 3 hours. Recovered 30' muddy oil-cut salt water, 1920' salty sulphury water. IBHFP: 15#, FBHFP: 985#, BHSIP: 2690#, Hydro: 3355#.
- April 16, 1954: D.S.T. #4. Tool open one hour. Shut in 20 minutes. Opened with fair blow that continued throughout test. Recovered 950' gas, 90' clean oil, 45' mud-cut oil, 30' oil-cut mud. No water. IBHFP: 28#, BHSIP: 3090#, FBHFP: 85#, Hydro: 3463#.

RECEIVED

APR 22 - 1954

LAND AND MINERAL COMMISSION  
STATE OF MONTANA



EAST POPLAR UNIT WELL #32  
SW NE Section 15-T28N-R51E  
Roosevelt County, Montana

- May 3, 1954: Ran 500 gallons Dowell plugging material. Press climbed from 1400# to 3700# with 450 gallons in formation. Bypassed 50 gallons up casing and acidized with 3000 gallons etching acid. Average injection rate 2.7 barrels per minute at 1800#. Flowed spent acid in 7 minutes, formation fluid in 32 minutes. Cleaned to pits. Flowed at estimated rate of 100 BOPD and 400 BHPD. Open flow.
- May 4, 1954: Testing. Test: Open flow, 5.43 BFPD, 35 per cent water with trace of mud, TFP: 100#, CP: 625#. Test not conclusive.

Installed a pumping unit

RECEIVED  
MAY 11 1954  
REG. C-1954  
OFFICE OF THE COMMISSIONER  
OF THE STATE OF MONTANA

FILED 11 11 11 11

POV C - 1954

MINERAL COMMISSION  
STATE OF MONTANA

EAST POPLAR UNIT WELL #32  
SW NE Section 15-T28N-R51E  
Roosevelt County, Montana

- March 22, 1954: Spudded 11:00 A.M., 3-22-54.
- March 24, 1954: Set 980.55° of 9-5/8" casing at 992.55° with 390 sacks cement. Plug down at 6:15 A.M., 3-24-54. Bumped plug with 800#. Released pressure, float held okay.
- April 19, 1954: Set 5809.10° of 5-1/2" casing at 5819° with 300 sacks Pozmix. Bumped plug with 1000#, held okay.
- April 20, 1954: Drilled plug and cement to 5812°. Ran open end tubing to 5790°. Displaced with oil. Rigged up to perforate.
- April 21, 1954: Set tubing at 5768.12°, Schlumberger measurement. Displaced water with oil and perforated 5790-5800°, Schlumberger measurement, with 50 shots. Acidized with 1000 gallons etching acid. Formation broke at 2000#. Injected 2.4 bbls. per minute at 1600#. Bled down to 1500#. Acid water to surface in 18 minutes; 10 per cent oil, 90 per cent acid water in 40 minutes. Now flowing 70 per cent to 90 per cent water at rate of 100 to 200 bbls. fluid per day, open flow with 500# casing pressure after 15 hours. Chloride of water: 16,000 PPM.
- April 22, 1954: Flowed in tank at rate of 100 to 200 BFPD. Tubing pressure: 125#. Casing pressure: 625#. 60 to 80 per cent water. Chlorides: 13,000 PPM. Rig released at 2:00 P.M., 4-21-54.

Location: C SW NE Sec. 15 T20N-R51E

Spacing ~ 160 acres

Elevation: 2088 K.B. ~ 2078 Gr.

Spudded: 3-22-54

Completed: 5-8-54

T.D.: 5821' Schl = 5816' Drlr.

Prod. Zones: C-2 (5790-5800')

Schlumberger Tops

	Depth	Datum	Thickness
Judith River	767	+1321	
Greenhorn	2362	- 274	
Muddy Sd	2950	- 862	
Dakota Silt	3142	-1054	
Piper Ls	4350	-2262	
Amsden	4220	-2132	
Heath	4848	-2760	
Otter	5000	-2912	
Kibbey Sd	5140	-3052	
Kibbey Ls	5295	-3207	
Madison	5387	-3299	
A-1	**5472	-3384	3'
A-2	**5480	-3392	4'
A-3	5490	-3402	7'
A-4	*5497	-3409	33'
B-1	*5636	-3548	8'
B-2	*5654	-3566	17'
B-3	**5676	-3588	6'
B-4	**5707	-3619	6'
B-5	5744	-3656	?
C-1	**5784	-3696	?
C-2	5792	-3704	18'

\*\*Probable prod. Zones (From DST structural position, etc.)

\*Shows

Drill Pipe Corrections (Made)

None Recorded

Coring Intervals:

#1 5490-5548 Rec. 58' A-3 &amp; 4

#2 5629-5662 Rec. 33' B-1 &amp; 2

#3 5755-5795 Rec. 39' C-1 &amp; 2

#4 5795-5815 Rec. 20' C-2

Drill Stem Tests:

DST #1 5493-5503' A-3 &amp; 4. Op 3½ hrs w/good blw decreasing to fair blw in 2½ hrs. Gas to surf 3 hrs, 20 min. Rec. 30' cln oil, 5165' s.w. Tool would not close for SI press. IBHFP 26#, FBHFP 2503# Hydro 3330.

DST #2 5632-41 B-1 Op 4 hrs, op w/wk blw decrs to v. wk blw after 1½ hrs, lasted thru cut. Rec. 60' gas, 5' cln oil, 656' s.w. IBHFP 15 FBHFP 220 (20 min) BHSIP 2663 Hydro 3463.

DST #3 5642-53 B-2. Op 4 hrs, w/wk blw, increases sl after 3 hrs. Rec. 30' muddy oil cut s.w., 1920' salt sulf wtr. IBHFP 15, FBHFP 985, (20 min) BHSIP 2690 Hydro 3355.

DST #4 5777-95 C-1 &amp; 2 Op 1 hr w/fair blw which cont'd thru cut. Rec. 950' gas, 90' cln oil, 45' mud cut oil, 30' oil cut mud w/no wtr. IBHFP 38 FBHFP 85 (20 min) BHSIP 3090, Hydro 3463.

History Subsequent to Completion:

None

18P

March, 1973

EAST POPLAR UNIT NO. 32

WORKOVER NO. 1

Lease and Well No.: East Poplar Unit

Field: East Poplar Unit County: Roosevelt State: Montana

Well Location: SW NW Section 15, T28N, R51E

STATES PRIOR TO PRESENT JOB:

Date Completed: May 8, 1954 Date Of Last Workover: None

T.D.: 5821' PBTD: 5812' Perforations: 5790-5800'

Cumulative Production: 81,971 BO 555,463 BW

Latest Test: January, 1973 88 BFPD 5 BOPD 83 BHPD 94% BS&W

JUSTIFICATION FOR WORKOVER:

This well was completed in 1954 from the C-3 and treated with 4,000 gallons of etching acid. Production has decreased and is uneconomical. Before abandonment a stimulation job should be attempted.

SUMMARY OF WORKOVER:

3-9-73 5812' PBTD Preparing to move in pulling unit.

3-10-73 5812' PBTD Preparing to acidize well.

3-11-73 5812' PBTD Preparing to run tubing and rods.

Tubing on vacuum this A.M.. Pulled tubing and layed down anchor, seating nipple and perforated nipple. Ran Baker retrievomatic packer, to 5770' (did not hydrotest - no truck available). Filled hole and spotted acid 1 joint above packer and set packer. Pressured annulus to 500 PSI - formation took acid at 3 BPM at 700 PSI and built to 1400 PSI with 34 bbls. in formation. Broke back to 1100 PSI with 50 bbls. in formation. Pressure slowly increased to 1200 PSI with all acid in formation. Pressure decreased to 1100 PSI with a 20 bbl. overflush in formation - a rate of 3 BPM and low pressure was maintained because of not being able to hydrotest tubing. I.S.I. = 500 PSI 15 Min. S.I. vacuum. S.I. overnight. Well was acidized with 3000 gallons of 28% retarded, inhibited HCL acid.

2-73 5812' PBTB Pump Testing  
 Pulled tubing and layed down to packer. Ran tubing and rods with old pump and put well to pumping. Started pumping at 1:00 P.M.  
 Load fluid and acid 228 Bbls.

3-13-73 5812' PBTB Pump Testing  
 Pumping up and unseated pump - Reseated pump and started pumping.  
 Load To Recover 228 Bbls.  
 Recovered 213 Bbls.  
 Left To Recover 15 Bbls..

3-14-73 5812' PBTB Pump Testing  
 18 Hr. Test Pumped 90 BF = 120 BFPD 99% BS&W 120 BWPD 0 BOPD  
 Recovered all load fluid plus 105 bbls. of formation fluid

3-15-73 5812' PBTB Pump Testing  
 Pumped 17-1/2 Hrs. 91 BF = 125 BFPD 100% BS&W 125 BWPD 0 BOPD

3-16-73 5812' PBTB Pump Testing  
 Pump would not hold pressure. Pulled and replaced same. Will have test in A.M.

3-17-73 5812' PBTB Pump Testing  
 2 Hr. Test Pumped 13 BF = 156 BFPD 100% BS&W 156 BWPD 0 BOPD

3-18-73 5812' PBTB Pump Testing  
 20 Hr. Test Pumped 141 BF = 169 BFPD 100% BS&W 169 BWPD 0 BOPD

3-19-73 5812' PBTB Pump Testing  
 Pumped 4 Hrs. 32 BF = 192 BFPD 99% BS&W 190 BWPD 2 BOPD

3-20-73 5812' PBTB Pump Testing  
 Pumped 4 Hrs. 33 BF = 198 BFPD 98% BS&W 194 BWPD 4 BOPD

3-21-73 5812' PBTB Pump Testing  
 Pumped 3 Hrs. 24 BF = 192 BFPD 190 BWPD 99% BS&W 2 BOPD

5-1-72 5012' UNLD Pumping - No Test

5-1-72 5012' UNLD Pump Testing

3 Hr. Test Pumped 22.11 BF = 164 BHPD 174 DHPD 7 DWD 98% W.C.

5-1-72 5012' UNLD Pumping - No Test

5-1-72 5012' UNLD Pumping - No Test

5-1-72 5012' UNLD Pump Testing

3 Hr. Test Pumped 22.11 BF = 164 BHPD 174 DHPD 7 DWD 98% W.C.

5-1-72 5012' UNLD Pump Testing

3 Hr. Test Pumped 22.09 BF = 161 BHPD 174 DHPD 7 DWD 98% W.C.

5-3-72 5012' UNLD Pump Testing

3 Hr. Test Pumped 22.11 BF = 165 BHPD 177 DHPD 7 DWD 98% W.C.  
Underwater Potential - To Drop From Report

Underwater Potential:

Underwater Potential:

Underwater Potential:

Underwater Potential:

Underwater Potential:

5780' to 5800' (Under 40)

5012' (Unchanged)

G-Force (Unchanged)

165 BHPD 98% W.C. 177 DHPD 7 DWD

Underwater Unsuccessful - Under 40  
increased from 34X to 40X and all other  
section was increased from 34X to 40X

3-22-73 5312' PSTD Pumping - No Test

3-23-73 5312' PSTD Pump Testing  
 3 Hr. Test Pumped 32 BF = 192 BFPD 6 BOPD 186 BWPD 97% W.C.

3-24-73 5312' PSTD Pumping - No Test

3-25-73 5312' PSTD Pumping - No Test

3-26-73 5312' PSTD Pump Testing  
 4 Hr. Test Pumped 31 BF = 186 BFPD 6 BOPD 180 BWPD 97% W.C.

3-30-73 5312' PSTD Pump Testing  
 3 Hr. Test Pumped 22.69 BF = 181 BFPD 174 BWPD 7 BOPD 96% W.C.

4-5-73 5312' PSTD Pump Testing  
 3 Hr. Test Pumped 23.11 BF = 185 BFPD 177 BWPD 7 BOPD 96% W.C.  
 Workover Potential - To Drop From Report

LOG OF WORKOVER:

Final Perforation:

5790' to 5800' (Unchanged)

Final PSTD

5312' (Unchanged)

Geologic Name Of Producing Zone:

C-Zone (Unchanged)

Workover Potential:

185 BFPD 96% W.C. 177 BWPD 7 BOPD

Workover Unsuccessful - Water cut was increased from 94% to 96% and oil production was increased from 5 BOPD to 7 BOPD



December, 1973

EAST POPLAR UNIT NO. 32

WORKOVER HISTORY NO. 2

Lease and Well No.: East Poplar Unit No. 32

Field: East Poplar Unit County: Roosevelt State: Montana

Well Location: SW NW Section 15, T28N, R51E

STATUS PRIOR TO PRESENT JOB:

Date Completed: May 8, 1954 Date Of Last Workover: None

T.D.: 5821' PBTD: 5812' Perforation: 5790-5800'

Cumulative Production: 83,062 BO 582,522 BW

Latest Test: 9-12-73 66 BFPD 3 BOPD 63 BFPD 96% BSCW

JUSTIFICATION FOR WORKOVER:

Production has decreased to the point where it is uneconomical to produce. An attempt should be made to complete this well in the A-Zone before abandonment.

SUMMARY OF WORKOVER:

12-18-73 5812' PBTD Move in pulling unit and rig up;

12-19-73 5812' PBTD  
Pulled rods, strapped tubing out of hole and ran G-Ray-Neutron & Cellar log from 5800' to 5400'. Ran and set one Go-International (Elite) 5-1/2" C.I. bridge plug with top of plug at 5770'. Pumped 1 sack of cement on top of plug. New PBTD 5762'.

12-20-73 5762' PBTD  
Hydro-tested 2-3/8" tubing with 2 joints tail pipe, Baker 120 packer and 2-3/8" S.N. to 4000 PSI. Split 6 joints, bent 3 joints, split 1 collar. Ran 1-11/16" thru tubing perforating gun. Gun hung up at 5812'. Unable to go any lower. Pulled out of hole with gun. Ran 1-11/16" sucker bar. Found bent joint of tubing at 5267'. Shut in for the night.

12-21-73

5762' PSTD

Pulled out of hole with tubing, replaced bent joint and run in hole with tubing. Ran 1-11/16" perforating gun. Gun would not go thru sealing nipple due to swelled head on gun. Replaced same. Perforated the A-2 and A-3 Zones from 5480-5495', 4 holes per foot with no vacuum or flow. Shut in for the night.

12-22-74

5762' PSTD

Tubing pressure after 15 Hr. S.I. - 700 PSI. Opened well to test tank. Well flowed 2.85 bbls. fluid and was dead in 15 mins. Rigged up swabline. Made 9 runs with swab. Recovered 55 bbls. fluid (100% salt water) with no indication of fluid entry. Shut in well. Preparing to acidize in A.M.

12-23-73

5762' PSTD

Installed stripper head and acidized the A-2 and A-3 Zone perforations from 5480-5495' as follows: Circ. hole with salt water, set packer, pressured casing to 1000 PSI. Broke formation with 3400 PSI (S.W.), 1/4 BPM injection rate. Released pressure and packer. Spotted acid to within 2 bbls. of perforations. Set packer, repressured casing to 1000 PSI and pumped 3000 gallons of 28% HCL with inhibitor, emulsion breaker, and sequestering agent added at the following rates and pressures.

Maximum Rate	1-1/2 BPM
Minimum Rate	1/4 BPM
Average Rate	1 BPM
Maximum PSI	3400 PSI
Minimum PSI	900 PSI
Average PSI	1400 PSI

Total Load Used 127 Bbls. PSIP 600 PSI 10 Min. S.I. 500 PSI Shut in for the night.

12-24-73

5762' PSTD

17 Hr. S.I. Tubing Pressure = 350 PSI. Flowed to test tank 100 bbls. in 1 hr. and 15 mins. Turned to pit and flowed acid to pit. Shut in well. PSIP - 110 PSI 15 Min. S.I. - 160 PSI 30 Min. S.I. - 175 PSI 1 Hr. S.I. - 180 PSI. Installed adjustable choke, set on 16/64 and turned thru treater.

12-25-73

5762' PSTD

Flowing to tank battery. TFP - 135 PSI on a 16/64" choke. Wellhead sample 100% water.

12-26-73

5762' PSTD

Killed well with heavy salt water. Flanged up wellhead. Well did not die completely with 9.8#/gallon salt water. Turned to battery for flow test.

12-27-73

5762' PSTD

Well flowing - No test - Flowline leak. 100% water

8-3-75. 4 BOPD + 351 BWD 997. '764

12-28-74 5762' PBD Well Flowing - No Test Test Line Leak 100% Water  
 12-29-74 5762' PBD Well Flowing - No Test 100% Water  
 12-30-74 5762' PBD Well Flowing - No Test 100% Water  
 12-31-74 5762' PBD Well Flowing - No Test 100% Water  
 1-1-75 5762' PBD Well Flowing - No Test 100% Water  
 1-2-75 5762' PBD Well Flowing - No Test 100% Water  
 1-3- thru 5762' PBD Well Flowing - Tests were not run on this well but bank battery  
 1-10-75 production indicates approximately 6 BOPD from it.  
 1-11-75 5762' PBD Flow Testing P-47 Choke 24 Hr. Test 213 BPD 6 BOPD 207  
 BHP, 97% W.C.

Workover Potential - To Drop From Report

DETAILS OF WORKOVER:

Final Perforations:

5438-5436'

Final PBD:

5262'

Geological Name Of Producing Zone:

A-2 and A-3 Zones

Workover Potential:

213 BPD 6 BOPD 207 BHP 97% W.C.  
 Workover Successful.

DOWELL INCORPORATED  
TREATMENT REPORT

STAGE NO.

TREATMENT NO.

615

DISTRICT Denver #15 STATION Williston DATE 4-20, 1954

OWNER Murphy Oil Company LEASE E.P.U. WELL NO. 32  
POOL East Poplar COUNTY Roosevelt STATE Montana  
LOCATION 15-28N-51E OWNER'S REPRESENTATIVE Curnutt

WELL DATA

FORMATION Madison  
PAY FROM 5790 TO 5800  
PRESENT TOTAL DEPTH 5812 P. B. FROM 5821

PIPE DATA—  
CASING SIZE 5 1/2" WT. 15.5#  
CASING DEPTH 5818 SKS. CEMENT 300  
LINER SIZE \_\_\_\_\_ WT. \_\_\_\_\_  
LINER DEPTH-FROM \_\_\_\_\_ TO \_\_\_\_\_  
LINER DESCRIPTION \_\_\_\_\_  
TUBING SIZE 2" EVE DEPTH 5767  
PACKER-TYPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
PACKER FURNISHED BY OPERATOR \_\_\_\_\_ DOWELL \_\_\_\_\_

PERFORATING DATA OR PAY ZONES

SHOTS/FT.	FROM	TO
<u>5</u>	<u>5790</u>	<u>5800</u>

PRODUCTION—

INITIAL	OIL	WATER	G. O. R.
<u>PRESENT</u>			

ACIDIZING, SHOOTING AND LOGGING RECORD—

RECEIVED

APR 30 1954

COMPLETION DATA—

DATE Nov CABLE TOOL \_\_\_\_\_  
ROTARY Yes DRILLING FLUID Mud  
SIZE OPEN HOLE \_\_\_\_\_

DETAILED RECORD OF TREATMENT

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA - BILLINGS

TIME	PRESSURE	REMARKS
A.M. OR P.M.	CASING	TUBING
<u>5:30AM</u>		ARRIVAL AT LOCATION WITH <u>1000</u> GALS. OF DOWELL <u>Jal X100</u>

FILL	BBLS.
<u>BLEED</u>	<u>23</u> BBLS.
<u>FLUSH</u>	<u>23</u> BBLS.

TIME	OUT OF TANKS	BBLS. OF ACID IN FORMATION	PER READING	PER MINUTE	REMARKS
<u>8:30</u>					<u>Start circulating Mud w/oil</u>
<u>10:30</u>					<u>Hole loaded</u>
<u>10:45</u>					<u>Stand by for perfo.</u>
<u>1:25</u>	<u>500</u>				<u>Start Acid</u>
<u>1:44</u>	<u>700</u>	<u>0</u>	<u>24</u>		<u>Acid spotted on perfo.</u>
<u>1:46</u>	<u>2000</u>	<u>1500</u>			<u>Broke to 1800 psi on casing</u>
<u>1:49</u>	<u>1600</u>	<u>1600</u>	<u>12</u>	<u>2.4</u>	
<u>1:56</u>	<u>1800</u>	<u>1800</u>	<u>24</u>	<u>1.7</u>	<u>Tubing flushed</u>
					<u>Turn to pit</u>

5:30PM LEFT LOCATION  
IF TREATMENT IS NOT CONVENTIONAL LIMESTONE FORMATION TREATMENT TO INCREASE OIL OR GAS PRODUCTION, STATE PURPOSE OF TREATMENT.

Broken head

DISTRICT OFFICE COPY,

W. B. Wilson

SERVICE ENGINEER

E. H. Nielsen

STATION OR DISTRICT MANAGER

DOWELL, INCORPORATED

**TREATMENT REPORT**

TREATMENT NO.

DISTRICT 15 Denver STATION Gbudive DATE 4-20, 1954

OWNER Murphy Oil Co LEASE E.P.H WELL NO. 32  
POOL E.P. COUNTY Roberts STATE Mont  
LOCATION 15-28N-51E OWNER'S REPRESENTATIVE \_\_\_\_\_

WELL DATA

FORMATION Madison  
PAY-FROM 5790 TO 5800  
PRESENT TOTAL DEPTH 5812 P. B. FROM 5821

PIPE DATA-

CASING SIZE 5 1/2 WT. 15.5  
CASING DEPTH 5819 SKS. CEMENT 300  
LINER SIZE \_\_\_\_\_ WT. \_\_\_\_\_  
LINER DEPTH-FROM \_\_\_\_\_ TO \_\_\_\_\_  
LINER DESCRIPTION \_\_\_\_\_  
TUBING SIZE 2 3/4 DEPTH 5768  
PACKER-TYPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
PACKER FURNISHED BY OPERATOR \_\_\_\_\_ DOWELL \_\_\_\_\_

PERFORATING DATA OR PAY ZONES

SHOTS/FT.	FROM	TO
<u>5</u>	<u>5790</u>	<u>5800</u>

PRODUCTION-

	OIL	WATER	G. O. R.
INITIAL			
PRESENT			

ACIDIZING, SHOOTING AND LOGGING RECORD-

initial

COMPLETION DATA-

DATE NCW CABLE TOOL \_\_\_\_\_  
ROTARY yes DRILLING FLUID mud  
SIZE OPEN HOLE \_\_\_\_\_

DETAILED RECORD OF TREATMENT

TIME	PRESSURE	REMARKS
A.M. OR P.M.	CASING	TUBING
<u>5:30 A</u>		ARRIVAL AT LOCATION WITH <u>1000</u> <u>701x100</u> GALS. OF DOWELL

TIME	PRESSURE	REMARKS	BBLS. OF ACID			
			OUT OF TANKS	IN FORMATION	PER READING	PER MINUTE
<u>8:30</u>		<u>St circulating H<sub>2</sub>O w/ oil</u>				
<u>10:30</u>		<u>Hole loaded</u>				
<u>10:45</u>		<u>stand by for perfo.</u>				
<u>8:25p</u>	<u>500</u>	<u>St Acid</u>				
<u>3:44</u>	<u>700 0 24</u>	<u>Acid spotted on perfo.</u>				
<u>3:46</u>	<u>2000 1600</u>	<u>Brake to 1800 psi on ass.</u>				
<u>3:49</u>	<u>1600 1600</u>		<u>12</u>	<u>12</u>	<u>2.4</u>	
<u>3:56</u>	<u>1800 1800</u>	<u>Tubing flushed</u>	<u>24</u>	<u>12</u>	<u>1.7</u>	
		<u>Turn to pit</u>				

Bleed-down Press. 1500#

5:30p LEFT LOCATION  
IF TREATMENT IS NOT CONVENTIONAL Limestone FORMATION TREATMENT TO INCREASE OIL OR GAS PRODUCTION, STATE PURPOSE OF TREATMENT.

Braden Head

MR. Wilson

SERVICE ENGINEER

STATION COPY.

STATION OR DISTRICT MANAGER



PAID IN ADVANCE  
100 0-15 12000 10-00

DOWELL INCORPORATED

STAGE NO.

## TREATMENT REPORT

TREATMENT NO.

642

DISTRICT Denver #15 STATION Williston DATE 5-1, 1954OWNER Murphy Corporation LEASE E.P.U. WELL NO. 32  
POOL East Poplar COUNTY Roosevelt STATE Montana  
LOCATION Sec 15-26N-51E OWNER'S REPRESENTATIVE Gurnutt

## WELL DATA

FORMATION Charles  
PAY-FROM 5740 TO 5800  
PRESENT TOTAL DEPTH 5812 P. B. FROM 5821

## PERFORATING DATA OR PAY ZONES

SHOTS/FT. FROM TO  
4 5740 5800

## PIPE DATA-

CASING SIZE 5 1/2" WT. 15 1/2"  
CASING DEPTH 5819 SKS. CEMENT 300  
LINER SIZE None WT.   
LINER DEPTH-FROM  TO   
LINER DESCRIPTION   
TUBING SIZE 2" EUE DEPTH 5768  
PACKER-TYPE  DEPTH   
PACKER FURNISHED BY OPERATOR DOWELL

## PRODUCTION-

OIL WATER G. O. R.  
INITIAL     
PRESENT   

## ACIDIZING, SHOOTING AND LOGGING RECORD-

RECEIVED

MAY 14 1954

## COMPLETION DATA-

DATE  CABLE TOOL   
ROTARY  DRILLING FLUID   
SIZE OPEN HOLE 

## DETAILED RECORD OF TREATMENT

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF MONTANA - BILLINGS

TIME A.M. OR P.M.	PRESSURE		REMARKS			
	CASING	TUBING				
			ARRIVAL AT LOCATION WITH <u>500 gal. Dowell Jel X830</u> <u>3000 GALS. OF DOWELL Jel X100</u>			
<u>11:30</u>			<u>Start 24 bbl oil</u>			
<u>11:55</u>			<u>Start 12 bbl plugging material</u>			
<u>12:07</u>			<u>Start 11 bbl Acid to spot plug</u>			
<u>12:15</u>	<u>500</u>	<u>200</u>	<u>Plugging material spotted</u>			
			BBLs. OF ACID			
			OUT OF TANKS	IN FORMATION	PER READING	PER MINUTE
<u>12:16</u>			<u>23</u>			
<u>12:18</u>	<u>1605</u>	<u>1100</u>	<u>27</u>	<u>4</u>	<u>4</u>	<u>2.0</u>
<u>12:23</u>	<u>2600</u>	<u>2100</u>	<u>33</u>	<u>10</u>	<u>6</u>	<u>1.2</u>
<u>12:24</u>	<u>3200</u>	<u>2700</u>	<u>33.5</u>	<u>10.5</u>	<u>.5</u>	<u>.5</u>
<u>12:25</u>	<u>2600</u>	<u>2100</u>				
			<u>Start plugging in formation</u>			
<u>2:01</u>	<u>3500</u>	<u>2400</u>	<u>37</u>	<u>14</u>	<u>3.5</u>	<u>Neg.</u>
<u>2:02</u>	<u>1500</u>	<u>1000</u>				
<u>2:07</u>	<u>1500</u>	<u>1400</u>	<u>48</u>	<u>25</u>	<u>11</u>	<u>2.0</u>
<u>2:10</u>	<u>1700</u>	<u>1600</u>	<u>58</u>	<u>35</u>	<u>10</u>	<u>3.1</u>
<u>2:14</u>	<u>1800</u>	<u>1800</u>	<u>69</u>	<u>45</u>	<u>11</u>	<u>2.8</u>
<u>2:20</u>	<u>1800</u>	<u>1800</u>	<u>85</u>	<u>62</u>	<u>16</u>	<u>2.7</u>
<u>2:21</u>						
<u>2:30</u>	<u>1900</u>	<u>1600</u>	<u>108</u>	<u>85</u>	<u>23</u>	<u>2.6</u>
<u>2:35</u>	<u>1600</u>					
			LEFT LOCATION			

IF TREATMENT IS NOT CONVENTIONAL LIMESTONE FORMATION TREATMENT TO INCREASE OIL OR GAS PRODUCTION, STATE PURPOSE OF TREATMENT.

B. Owen

SERVICE ENGINEER

STATION COPY.

E. H. Nielsen

STATION OR DISTRICT MANAGER

DOWELL INCORPORATED

TREATMENT REPORT

TREATMENT No.

DISTRICT #15 STATION Williston N.D. DATE 5-1, 1954

OWNER Murphy Corp LEASE E.P.H. WELL NO. 22  
POOL E. Poplar COUNTY ROOSEVELT STATE Montana  
LOCATION SEC OWNER'S REPRESENTATIVE \_\_\_\_\_

WELL DATA

FORMATION CHARLES  
PAY-FROM 5790 TO 5800  
PRESENT TOTAL DEPTH 5812 P. B. FROM 5821

PIPE DATA-

CASING SIZE 5-1/2" WT. 15-1/2  
CASING DEPTH 5819 SKS. CEMENT 300  
LINER SIZE 4-1/2" WT. 1  
LINER DEPTH-FROM 2 TO 2  
LINER DESCRIPTION \_\_\_\_\_  
TUBING SIZE 2" 5/8" DEPTH 5768  
PACKER-TYPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
PACKER FURNISHED BY OPERATOR \_\_\_\_\_ DOWELL \_\_\_\_\_

PERFORATING DATA OR PAY ZONES

SHOTS/FT.	FROM	TO
<u>2</u>	<u>5790</u>	<u>5800</u>

PRODUCTION-

	OIL	WATER	G. O. R.
INITIAL			
PRESENT			

ACIDIZING, SHOOTING AND LOGGING RECORD-

COMPLETION DATA-

DATE \_\_\_\_\_ CABLE TOOL \_\_\_\_\_  
ROTARY \_\_\_\_\_ DRILLING FLUID \_\_\_\_\_  
SIZE OPEN HOLE \_\_\_\_\_

DETAILED RECORD OF TREATMENT

TIME	PRESSURE		REMARKS			
A.M. OR P.M.	CASING	TUBING				
			500 gals Dowell 11/1/830			
			3000 GALS. OF DOWELL 11/1/100			
			ARRIVAL AT LOCATION WITH			
11:30			START 24 66/01			
11:55			START 12 66/ plugging material			
12:07			START 11 66/ Acid TO spot plug.			
12:15	595	200	plugging material spotted			
			BBLs. OF ACID			
			OUT OF TANKS	IN FORMATION	PER READING	PER MINUTE
12:16			23	-	-	-
12:18	1685	1100	27	4	4	2.0
12:23	2600	2100	33	10	6	1.2
12:24	3200	2700	33.5	10.5	.5	.5
12:25	2600	2100				
						start plugging in formation
						shut down bleed off 166/ of 459.
						RESUME pumping
						from 12:26 To 2:01 we were
						pressuring To 3700, letting it
						bleed down then repressuring
2:01	3500	2400	37	14	2.5	NE9
2:02	1500	1000				66/ Acid in formation
2:07	1580	1400	48	25	11	2.0
2:10	1780	1600	58	35	10	2.3
2:14	1700	1900	69	46	11	2.7
2:20	1900	1900	85	62	16	2.7
2:21						all Acid pumped start flush
2:30	1400	1600	108	85	23	2.6
2:35		1600				start 24 66/ oil/flush
						all Acid displaced shut down
						bleed down pressure
			LEFT LOCATION			

B. Owen

SERVICE ENGINEER

GENERAL OFFICE COPY.

STATION OR DISTRICT MANAGER

## DATE \_\_\_\_\_

5-10. 73

TREATMENT NUMBER

15-5-7187

ALLOWABLE PRESSURE*	
TBG: 2000	CSG: 700

WATER                      0.0000 INJ.  
C ☐                      D ☐

TOTAL DEPTH	CIRC. BMT.

TUBING SIZE 2 3/8	TUBING DEPTH 5770
PACKER TYPE 11	PACKER DEPTH

BAKER	5770
TBG VOLUME	STATIC BHT.

BAKER	5770
TBG VOLUME	STATIC BHT.

22.4	
------	--

D INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
500					

570					
800	-	.			

570					
800	-	.			

[illegible]

# SERVICE LOG

### Things to keep:-

Water To Fill Hole -

\_\_\_\_\_

\_\_\_\_\_

---

051215 10 300051-

12. 11. 1913

check.

## Stomach full water fish

TEC-

---

500

4:0 Max RATE 3 BPN

300 Min. Latr - 2.5 BPM

Ans Rule - 2.8 BPM

0	PROPS AND LIQUIDS INJECTED		
271			

	TYPE	SIZE OR PURPOSE	AMOUNT
0197	2.00X	2570	300.00


PROD. BEFORE TREATMENT		PROD. AFTER TREATMENT	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TEST	ALLOWABLE	DAYS	TEST	ALLOWABLE



**OIL WELL CEMENTING COMPANY**

**DUNCAN, OKLAHOMA**

## CEMENTING SERVICE TICKET

DATE 3-24-54 PLACE Poplar, Mont. ORDER NO. \_\_\_\_\_

Well No. 32 Farm EPU County Roosevelt State Mont. Sec.      T.      R.     

2	Murphy Corp	Owner or Contractor	Penrod Drlg. Co.
---	-------------	---------------------	------------------

Mailing Address Murphy Bldg.  
 City & State Shreveport, La.

City & State	El Dorado, Ark.	Truck Called Out	8 AM	3033	Location	11 AM	Job Began	5 AM	Job Completed	6:30 AM
--------------	-----------------	------------------	------	------	----------	-------	-----------	------	---------------	---------

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

[illegible][illegible]

### OTHER DATA ON SERVICE OPERATION

PLUGS AND HEADS		PRESSURE	CEMENT LEFT IN CASINO	10	FT.
BOTTOM PLUG	TYPE	CIRCULATING	350	BY REQUEST?	<input checked="" type="checkbox"/>
TOP PLUG	TYPE 5 W	MINIMUM	0	NECESSITY?	
TYPE HEAD		MAXIMUM	1000	MEASURED WITH LINE?	

SERVICE AND RENTAL CHARGES				TRUCK	TITLE	NAME	LOCATION	STATE
DEPTH OF JOB <u>992</u> FT.				3770	CEMENTER	J. Dungan	Wolf Point	Mont.
PRICE REF.					DRIVER	E. Meyer		
R-3	BASE CHARGE	\$	290 00		CEMENTER			
R-80	ADD'N. CHARGE	\$	8 00		DRIVER			
	EXTRA TRUCK	\$			CEMENTER			
	STAND BY TRUCK	\$			DRIVER			
	MILEAGE @	\$			CEMENTER			
		\$			DRIVER			
		\$			CEMENTER			
		\$			DRIVER			
		\$			CEMENTER			
		\$			DRIVER			
		\$			CEMENTER			
		\$			DRIVER			
	TOTAL CHARGE	\$	298 00		CEMENTER			

RECEIVED  
 APR 21 1954  
 U.S. GEOLOGICAL SURVEY

ON THE SAS CONSERVATION COMMISSION

The above job was done and equipment used under the exclusive control, direction and supervision of the operator or his agent whose signature appears below and who certifies the above data furnished by him is correct:

J. W. Curnutt

OWNER, OPERATOR OR HIS AGENT

*The following information is urgently requested in order that we may be fully advised and to enable us to keep our standard of service up to the highest point.*

WAS OPERATION OF THE CEMENTING EQUIPMENT SATISFACTORY? \_\_\_\_\_ WAS THE WORK OF THE CEMENTING CREW PERFORMED IN A SATISFACTORY MANNER? \_\_\_\_\_

WAS THE CEMENTING JOB SATISFACTORILY COMPLETED? \_\_\_\_\_
 SUGGESTIONS: \_\_\_\_\_

J. W. Curnutt  
OWNER OPERATOR OR HIS AGENT

COPY No. 53718 G

# HALLIBURTON OIL WELL CEMENTING CO.

## FORMATION TESTING AND TOOL SERVICE TICKET

Date 4-8-54 Place Poplar, Montana Order No. 3763 Outfit No. 3763  
 Well No. 32 Farm EPU County Roosevelt Sec. 15 Twp. 28N Range 51E

OTHER DESCRIPTION

CHARGE Murphy Corp. OWNER Murphy Corp.  
 MAILING ADDRESS Murphy Bldg CONTRACTOR Penrod Drlg. Co.  
 CITY & STATE El Dorado, Ark. Truck called out 9 AM On 11 PM location 4-7-54 AM Job 8 PM Began 6 AM Job 6 PM plotted

Depth of Casing 5548 Condition of Well good Size Drill Pipe 4" H90 Size Tubing --- Size Casing ---  
 Kind of Job Straddle Test Tool No. 4145 Pressure Device No. BT 308 PRD 1476 Temperature Device No. ---  
 Size of Rat Hole 6 1/8" Length of 10' between Condition of Rat Hole good Amt. of Time Tool Open 3 hrs. 30 min. Result of Test: ☐ GAS ☐ OIL ☐ DRY

TIME MIXING AND PUMPING	NO. SACKS	ANC. SIZE PACKER	KIND OF TOOL	DEPTH SET	PRESSURE	
					BREAKING FORM	SQUEEZING
		<u>5 1/2"</u>	<u>5 7/8" Hydrspring tester</u>	<u>5493'</u>	<u>Top</u>	
			<u>No jars run by request</u>	<u>5503'</u>	<u>bottom</u>	
			<u>J-50 closed in Press valve used.</u>			

		PRICE			Kind of Job & Explanation	Recovered
Price Job	R	305	\$ 254	00		
	R	307	\$ 75	00		
Packer Charge			\$			
	R	335	\$ 15	00		
Other Charge (Explain)			\$			
TOTAL			\$ 344	00		
					Straddle test in Madison lime	
					gas to surface in 3 hrs 20 min.	30' clean oil
					5165' salt water	

The Above Job Was Done, And All Tools Were Used Under The Exclusive Control, Direction And Supervision of the Owner, Operator or His Agent Whose Signature Appears Below.

T. M. Gass Wolf Point, Mont. J. W. Curnutt  
 HOWCO OPERATOR LOCATION OWNER, OPERATOR OR HIS AGENT

The Following Information is Urgently Requested in Order That We may Be Fully Advised And To Enable Us To Keep Our Standard of Service Up To The Highest Point.

Was Operation Of The Equipment Satisfactory? \_\_\_\_\_ Was The Job Satisfactorily Completed? \_\_\_\_\_

Suggestions: \_\_\_\_\_

COPY

No 57030

AT

J. W. Curnutt

OWNER, OPERATOR OR HIS AGENT



**Halliburton**  
OIL WELL CEMENTING COMPANY  
DUNCAN, OKLAHOMA

# CEMENTING SERVICE TICKET

DATE 4-10-54 PLACE Poplar, Mont. ORDER NO. \_\_\_\_\_

Well No. 32 Farm E.P.U. County Roosevelt State Mont. Sec. 15 T. 29 R. 51

CHARGE TO Murphy Corporation Owner or Contractor \_\_\_\_\_

Mailing Address Murphy Building City & State \_\_\_\_\_

City & State El Dorado, Ark. Truck Called Out 1 PM On Location 6 AM Job Began AM Job Completed AM

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

TYPE OF JOB (V) ONE		CASING		HOLE DATA		TUBING OR DRILL PIPE		CEMENTING PACKER		MAKE FLOAT EQUIPMENT	
SURFACE		NEW		BORE SIZE		SIZE		SIZE		FLOAT COLLAR	
INTERMEDIATE		USED								GUIDE SHOE	
PRODUCTION		SIZE		TOTAL DEPTH		TYPE		TYPE		FLOAT SHOE	
SQUEEZE		WEIGHT		ROTARY		WEIGHT		WEIGHT		OTHER EQUIPMENT	
PUMPING		DEPTH									
PLUG BACK		TYPE		CABLE TOOL		TOTAL DEPTH		DEPTH SET			
GROUTING											
OTHER (Write In)	<u>Dry run</u>										

SQUEEZE OR PLUG BACK DATA				CEMENT DATA			
PURPOSE	DEPTH FROM	TO APPROX.	IN SIZE CASING HOLE	BULK?	SACKED?	MIXED WT. PER GAL	
				SACKS	TYPE	BRAND	% GEL OTHER ADMIX
WATER	<u>CALLED OUT ON BLOW OUT</u>						
GAS	<u>HAD WELL UNDER CONTROL BY THE</u>						
Abandon	<u>TIME WE GOT THERE</u>						

## OTHER DATA ON SERVICE OPERATION

PLUGS AND HEADS		PRESSURE		CEMENT LEFT IN CASINO		FT.
BOTTOM PLUG	TYPE	CIRCULATING		BY REQUEST?		
TOP PLUG	TYPE	MINIMUM		NECESSITY?		
TYPE HEAD		MAXIMUM		MEASURED WITH LINE?		

SERVICE AND RENTAL CHARGES				TRUCK	TITLE	NAME	LOCATION	STATE
DEPTH OF JOB _____ FT.				<u>3717</u>	CEMENTER	<u>Wainwright</u>	<u>Tioga</u>	<u>N.D.</u>
PRICE REF.					DRIVER	<u>Harrell</u>		
	BASE CHARGE	\$			CEMENTER			
	ADD'N. CHARGE	\$			DRIVER			
	EXTRA TRUCK	\$			CEMENTER			
	STAND BY TRUCK	\$			DRIVER			
<u>R-1</u>	MILEAGE <u>100</u> @ <u>.75</u>	\$	<u>75 00</u>		CEMENTER			
		\$			DRIVER			
		\$			CEMENTER			
		\$			DRIVER			
	TOTAL CHARGE	\$	<u>75 00</u>		CEMENTER			
		\$			DRIVER			

The above job was done and equipment used under the exclusive control, direction and supervision of the owner, operator or his agent whose signature appears below and who certifies the above data furnished by him is correct.

M. G. James  
OWNER, OPERATOR OR HIS AGENT

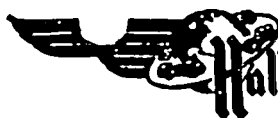
The following information is urgently requested in order that we may be fully advised and to enable us to keep our standard of service up to the highest point.

WAS OPERATION OF THE CEMENTING EQUIPMENT SATISFACTORY? \_\_\_\_\_ WAS THE WORK OF THE CEMENTING CREW PERFORMED IN A SATISFACTORY MANNER? \_\_\_\_\_

WAS THE CEMENTING JOB SATISFACTORILY COMPLETED? \_\_\_\_\_ SUGGESTIONS: \_\_\_\_\_

M. G. James  
OWNER, OPERATOR OR HIS AGENT

COPY No. 37441 G



OIL WELL CEMENTING COMPANY

DUNCAN, OKLAHOMA

# CEMENTING SERVICE TICKET

DATE 4-16-54 PLACE Poplar, Mont. ORDER NO. \_\_\_\_\_

Well No. \_\_\_\_\_ Farm \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_ Sec. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_

CHARGE TO	Mailing Address		Owner or Contractor		
	City & State		City & State		
	Eldorado, Ark.		Eldorado, Ark.		
	Truck Called Out <u>10:30</u> PM		On Location <u>8:30</u> AM		
		Job Began <u>11:30</u> AM		Job Completed <u>7:30</u> PM	

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

TYPE OF JOB (V) ONE	CASING	HOLE DATA	TUBING OR DRILL PIPE	CEMENTING PACKER	MAKE FLOAT EQUIPMENT
SURFACE	NEW	BORE SIZE	SIZE	SIZE	FLOAT COLLAR
INTERMEDIATE	USED	TOTAL DEPTH	TYPE	TYPE	GUIDE SHOE
PRODUCTION	SIZE	ROTARY	WEIGHT	WEIGHT	FLOAT SHOE
SQUEEZE	WEIGHT	CABLE TOOL	TOTAL DEPTH	DEPTH SET	OTHER EQUIPMENT
PUMPING <input checked="" type="checkbox"/>	DEPTH				
PLUG BACK	TYPE				
GROUTING					
OTHER (Write in)					

## SQUEEZE OR PLUG BACK DATA

PURPOSE	DEPTH FROM	TO APPROX.	IN SIZE CASING	HOLE
WATER	PUMPING OUT	FLOW LINES		
GAS				
Abandon				

## CEMENT DATA

BULK? SACKS	SACKED? TYPE	MIXED WT. PER GAL BRAND	% GEL	OTHER ADMIX

## OTHER DATA ON SERVICE OPERATION

PLUGS AND HEADS	PRESSURE	CEMENT LEFT IN CASING FT.
BOTTOM PLUG TYPE	CIRCULATING 0	BY REQUEST?
TOP PLUG TYPE	MINIMUM	NECESSITY?
TYPE HEAD	MAXIMUM 4500	MEASURED WITH LINE?

## SERVICE AND RENTAL CHARGES

PRICE REF.	DEPTH OF JOB	FT.
R-48		
BASE CHARGE	\$ 230	00
ADD'N. CHARGE	\$	
EXTRA TRUCK	\$	
STAND BY TRUCK	\$	
MILEAGE @	\$	
	\$	
	\$	
	\$	
TOTAL CHARGE	\$ 230	00

TRUCK	TITLE	NAME	LOCATION	STATE
3717	CEMENTER	Wainwright	Tioga	N.D.
	DRIVER	Thompson		
	CEMENTER			
	DRIVER			
	CEMENTER			
	DRIVER			
	CEMENTER			
	DRIVER			

The above job was done and equipment used under the exclusive control, direction and supervision of the owner, operator or his agent whose signature appears below and who certifies the above data furnished by him is correct.

J. W. Curnutt

OWNER, OPERATOR OR HIS AGENT

The following information is urgently requested in order that we may be fully advised and to enable us to keep our standard of service up to the highest point.

WAS OPERATION OF THE CEMENTING EQUIPMENT SATISFACTORY?	WAS THE WORK OF THE CEMENTING CREW PERFORMED IN A SATISFACTORY MANNER?
WAS THE CEMENTING JOB SATISFACTORYLY COMPLETED?	SUGGESTIONS:

J. W. Curnutt

OWNER, OPERATOR OR HIS AGENT

COPY No. 37442 G



OIL WELL CEMENTING COMPANY

DUNCAN, OKLAHOMA

## CEMENTING SERVICE TICKET

DATE 4-17-54 PLACE Poplar, Mont. ORDER NO. \_\_\_\_\_Well No. 32 Farm E.P.U. County Roosevelt State Mont. Sec. 15 T. 29 R. 41

CHARGE TO Murphy Corporation Owner of Penrod Drilg. Co.  
 Mailing Address Murphy Building City & State Shreveport, La.  
 City & State El Dorado, Ark. Truck Called Out 8 AM On Location 9:30 AM Job Began 3:30 PM Job Completed 4:30 PM

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

TYPE OF JOB (V) ONE		CASING		HOLE DATA		TUBING OR DRILL PIPE		CEMENTING PACKER		MAKE FLOAT EQUIPMENT	
SURFACE		NEW	X	BORE SIZE		SIZE		SIZE		FLOAT COLLAR	
INTERMEDIATE		USED								GUIDE SHOE	
PRODUCTION	X	SIZE	5 1/2	TOTAL DEPTH		TYPE		TYPE		FLOAT SHOE	
SQUEEZE		WEIGHT		ROTARY		WEIGHT		WEIGHT		OTHER EQUIPMENT	
PUMPING		DEPTH	5807	CABLE TOOL		TOTAL DEPTH		DEPTH SET		HOWCO Fillup shoe	
PLUG BACK		TYPE									
GROUTING											
OTHER (Write In)											

## SQUEEZE OR PLUG BACK DATA

PURPOSE	DEPTH FROM	TO APPROX.	IN SIZE CASING	HOLE
WATER				
GAS				
Abandon				

## CEMENT DATA

BULK? X	SACKED?	MIXED WT. PER GAL
SACKS	TYPE	BRAND
300	Reg.	Atlas
		% GEL
		OTHER ADMIX
		POZLAN

## OTHER DATA ON SERVICE OPERATION

PLUGS AND HEADS			PRESSURE		CEMENT LEFT IN CASINO 31 FT.	
BOTTOM PLUG	TYPE		CIRCULATING	400	BY REQUEST? X	
TOP PLUG	X	TYPE 5W Rubber	MINIMUM		NECESSITY?	
TYPE HEAD	P.C.		MAXIMUM	1000	MEASURED WITH LINE?	No

## SERVICE AND RENTAL CHARGES

DEPTH OF JOB	5807	FT.
PRICE REF.		
R-5	BASE CHARGE	\$ 303 00
	ADD'N. CHARGE	\$
	EXTRA TRUCK	\$
	STAND BY TRUCK	\$
	MILEAGE 100 @ .75	\$ 75 00
R-68		\$ 35 00
	900' @ 2.20	\$ 19 80
		\$
	TOTAL CHARGE	\$ 432 80

TRUCK	TITLE	NAME	LOCATION	STATE
3717	CEMENTER	Wainwright	Tioga	N.D.
	DRIVER	Thompson		
	CEMENTER			
	DRIVER			
	CEMENTER			
	DRIVER			
	CEMENTER			
	DRIVER			
	CEMENTER			
	DRIVER			

The above job was done and equipment used under the exclusive control, direction and supervision of the owner, operator or his agent whose signature appears below and who certifies the above data furnished by him is correct.

J. W. Curnutt

OWNER, OPERATOR OR HIS AGENT

The following information is urgently requested in order that we may be fully advised and to enable us to keep our standard of service up to the highest point.

WAS OPERATION OF THE CEMENTING EQUIPMENT SATISFACTORY?

WAS THE WORK OF THE CEMENTING CREW PERFORMED IN A SATISFACTORY MANNER?

WAS THE CEMENTING JOB SATISFACTORILY COMPLETED?

SUGGESTIONS:

J. W. Curnutt

OWNER, OPERATOR OR HIS AGENT

COPY No. 37443 G

P.O. BOX 1952  
WILLISTON, ND 58801  
PHONE: (701) 572-1087

### JOB TICKET

2882

Trk. Operator

Beard  
Riggers Boeckel

Charge to Invoice Address

Murphy

City \_\_\_\_\_  
Lease and  
Well no. \_\_\_\_\_

EPU #32

### Legal Description

Field East Poplar County Roosevelt  
Job No. 909P-35 State MT

Invoice No. \_\_\_\_\_  
 Invoice \_\_\_\_\_  
 Date \_\_\_\_\_  
 Customer's \_\_\_\_\_  
 Order No. \_\_\_\_\_  
 Date \_\_\_\_\_  
 Job Performed 10-6-94

Operating  
Base

### CONDITIONS OF THIS CONTRACT

TO PENKOTA WIRELINE SERVICES

You are hereby requested to furnish the service and materials and equipment herein set forth upon the following terms and conditions to wit:

The undersigned, as customer, agrees to pay you for the services and/or materials ordered hereunder at the office of Penkota Wireline Services, Williston, N.D. Should any account not be paid within the term fixed by the invoice, interest will be charged at the rate of ten per cent (10%) per annum from date of such invoice.

In the event you employ an attorney to enforce any claims of indebtedness against the undersigned customer, said customer agrees to pay all costs of collection and reasonable attorney's fees which, in no event, shall be less than the sum of \$75.00.

The above described work shall be performed by you as an independent contractor. However, it is understood and agreed that you do not guarantee the results of your service and shall not be liable for injury to persons or to property of well owners and/or customers unless caused by your willful negligence, this provision applying, but not limited to, subsurface damage and surface damage arising from subsurface damage. Well owner and/or customers shall be responsible for and secure you against any liability for reservoir loss or damage or personal property damage arising from a well blowout, unless such loss or damage is caused by your willful negligence. The well owner or drilling company will pay for the actual cost of replacing or repairing the well service equipment, or any part thereof, if same should be lost or damaged while being used in performing the work on the above described well.

Should any of your instruments, tools, or equipment be lost or destroyed in the rendition of your service, customer agrees to use all reasonable diligence and facilities available to recover the same, and customer agrees to reimburse you for the reasonable value of any instrument, tools, or other personal property that cannot be recovered within (60) days, or for the cost of repairing any damage to items recovered.

Customer certifies that it is the owner of the well on which the work herein ordered is to be done or that it has the full right and authority to order such work done on such wells; and that the well in which the work is to be done by you is in proper and suitable condition for the performance of said work.

Customer further agrees that the terms and conditions herein set forth constitute the entire agreement and that no employee of your company is authorized to alter the terms hereof. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

Donald H. Hargrave

Customer

Agent

PRODUCT CODE	DESCRIPTION	PRICE	AMOUNT
	Service Charge		
	Set 5½" BP @ 5400'		
	Total		1350.00
	TOTAL		







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